SAN DIEGO GAS & ELECTRIC COMPANY

ENERGY EFFICIENCY PROGRAMS ANNUAL REPORT

2012 RESULTS

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2012 ENERGY EFFICIENCY PROGRAM PORTFOLIO SUMMARY

Executive Summary

"The goal is for California's energy to be adequate, affordable, technologically advanced, and environmentally sound… Cost effective energy efficiency is the resource of first choice for meeting California's energy needs. Energy efficiency is the least cost, most reliable, and most environmentally –sensitive resource, and minimizes our contribution to climate change."

2005 CPUC and California Energy Commission's Energy Action Plan II

In 2012, San Diego Gas and Electric (SDG&E®) made significant progress driving energy efficiency efforts forward in California. We achieved this success through in-depth knowledge of customers' needs, technical energy efficiency expertise, strong partnerships with leading energy efficiency trade professionals, consultants and installers, but most importantly by helping our customers manage their energy use through a comprehensive approach of programs, services, tools and pricing options to fit their specific needs and preferences.

As a critical partner in energy efficiency efforts, SDG&E continues to pursue a number of strategies to expand participation in and enhance administration of energy efficiency programs. Through these efforts, SDG&E and our customers have made major contributions to the reduction of overall energy usage and the construction of a strong economy in California.

In the 2010-2012 program cycle, our customers have reduced their electricity use by over 932 million kilowatt hours and their gas usage by over 3.3 million therms. That equals enough electricity to power more than 155,300 homes for one year or taking almost 140,450 cars off the road for a year. In 2012 alone, our customers have reduced their electricity use by over 317 million kilowatt hours and their gas usage by over 1.3 million therms. That equals enough electricity to power almost 52,910 homes for one year or taking over 48,000 cars off the road for a year.

For SDG&E, energy efficiency and demand response are the first resource we turn to when ensuring reliable electricity supply to the region, as is mandated by the state of California. We believe that the megawatt of energy that is saved through energy efficiency is the most valuable and practical resource of all, because it doesn't require new infrastructure to obtain. Instead, it relies on our valued customers, and their dedication to making a difference in our community and for the environment by conserving energy at a grass roots level.

SDG&E – Becoming the Utility of the Future

Our industry will experience more change in the next 10 years than it has in the last 100 years – giving customers greater access to their usage data and a myriad of options to choose from. SDG&E believes our role is to serve as a trusted energy advisor for our customers:

- helping them become aware of their options while empowering them to make the best choices based on their needs;
- informing and educating them on legislative and regulatory issues/changes that can impact their service and bills;
- advising them on which programs provide the greatest energy and cost savings

- helping them evaluate the results, gauge performance and make adjustments as new technologies and offerings emerge.

San Diego is becoming a leading region for energy efficiency and sustainability, and together with the collective efforts of our dedicated customers, we can achieve this lofty goal.

We are committed to helping our customers and partners by providing customized energy solutions, expertise and insight to help them achieve their energy goals. Energy efficiency is based on partnerships and collaboration with SDG&E, statewide government agencies, the county, educational institutions, local cities, and both residential and business customers striving for an entirely new level of sustainability for the community at large. The pages that follow highlight the successes of our customers who invested their time and resources into creating innovative energy efficiency practices and solutions at their businesses and homes.

Thanks to their efforts, these customers are recognized as sustainability ambassadors in the community, demonstrating to others the many benefits of energy efficiency and demand response. Not only do their innovative practices help save money and reduce their energy consumption, they create a cleaner greener community for all.

The complete version of the following case studies can be found on the SDG&E's website at the following link: *http://www.sdge.com/business/energy-showcase-2013-winners*.

City of Chula Vista
A Model City of Sustainability

Through the ***SDG&E City of Chula Vista Partnership***, Chula Vista created innovative approaches to advance municipal and community energy efficiency. Underserved audiences like small businesses, elderly, youth and low-income residents are reached through a comprehensive outreach network that leverages libraries, recreation centers, affordable housing services, business licenses and permit application processes. Grassroots energy conservation education combined with facility improvements, energy codes and inspections, and energy-saving development has distinguished Chula Vista as a model municipal environmental champion. The City was recognized as the first Southern California local government to comprehensively embrace Climate Adaptation, a strategy to counter the inevitable impacts of climate change while complementing efforts to reduce greenhouse gas (GHG) emissions. Lending peer-to-peer support to neighboring municipalities, Chula Vista also inspires a team approach to the pursuit of regional energy-related initiatives seen by its recent creation of the South Bay Energy Action Collaborative.

Businesses Have Multiple Green Opportunities
As part of business licensing, energy "house calls" happen through the Free Resource & Energy Business Evaluations (FREBE) program, averaging over 1,000 visits annually. An impressive 82% of businesses implemented at least one energy improvement. The program also drove 668 businesses to ***SDG&E's Commercial Direct Install program*** for no-cost HVAC maintenance and lighting improvements that generated immediate energy savings. For

businesses interested in becoming even more sustainable, the City's CLEAN Business program provides additional technical support and community recognition.

Energy Efficiency is in The House
Chula Vista homeowners extensively engage in energy efficiency. Residents request free evaluations for energy and water-saving opportunities. Hundreds of home energy and water savings kits and energy-efficiency lighting were distributed through weekly community events. Over 2,500 rebates were allocated through the City's Home Upgrade.

Carbon Downgrade program, and nearly $300,000 in energy retrofit incentives were matched with ***SDG&E's Energy Upgrade California Program*** incentives—a significant showing since Chula Vista comprises 7% of the county population but represented 40% of Energy Upgrade projects. At local recreation centers, Empower Hour reached 1,310 youth through entertaining energy-efficiency curriculum, such as a "5-Minute Shower Challenge" for aquatic center users.

The City of San Diego
Leading the Nation in Creating a Sustainable Future

The City of San Diego is committed to both its citizens and the environment as it diligently pursues solutions to help create a sustainable energy future. Its ***City of San Diego Partnership with SDG&E (Partnership)*** has been a catalyst for achieving the energy efficiencies and greenhouse gas (GHG) savings to support this endeavor. Working together to promote energy efficiency and conservation to the city's employees, residents and local businesses, the city has also become a regional leader in its development of an education and outreach program with other local governments. Access to the partnership's network of stakeholder groups has facilitated the city's comprehensive assessment of codes, standards, policies and voluntary initiatives that drives the success of their efforts. Partnership funding has enabled the city to maintain consistency in its program development as it reaches for 2020 climate targets and energy goals.

City Flips the Switch on a Watt of Savings
Boosting energy efficiency has been a slam dunk in nearly two dozen recreation center gyms, showcasing works of art within Balboa Park museums and a bright idea along 3,000 miles of city streets. With an average 25% of the energy budget spent on street lighting, the city took an active role in the ***Partnership's Street Light Working Group*** and used induction lighting technology to convert 37,000 poles and illuminate an energy savings of approximately 16,000 MWh and 6,630 tons of GHG emissions. Dozens more municipal facilities continue to be surveyed for optimum energy-saving opportunities, such as an upgraded administration building boiler, which achieved an average annual natural gas reduction of 15,000 therms and 1,000 gallons of make-up water. Continuing to think big about energy efficiency, the city is poised to graduate to a Smart Energy Management System (SEMS) anticipated to reduce energy use by 10 to 30% in municipal buildings.

Community Planners Champion Green City
From Otay Mesa to Ocean Beach, plus a dozen neighborhoods in between, the partnership supported comprehensive efforts to invest in a green city by updating energy-efficiency and

long-term sustainability initiatives in community plans. Funding was dedicated to long-range planning that addresses environmental concerns around traffic, zoning, air quality, biology, GHG, geology, hydrology, recreation, noise and land use. Thousands of community-planning group members were invited to participate in the development of land use and climate mitigation and adaptation planning for their neighborhoods.

Tuning in to Energy Efficiency
Teaming up with a local news station, the partnership promotes energy efficiency and water conservation best practices through the Green Business Network. On-air success stories broadcast savings tips while behind-the-scenes outreach helps energy-efficient businesses advance their savings through ***SDG&E's My Account,*** an online energy management tool. Further empowering San Diego residents to champion environmental stewardship through proper disposal of compact fluorescent bulbs, a CFL bulb recycling program collected CFLs for disposal.

Earning an "A" in Sustainability
A highlight of the city's community outreach and education is the Green Schools program and annual Green Students Youth Forum, where hundreds of high school students learn about GHG emission reduction through energy efficiency and conservation. From an energy debate to tours of a demonstration garden built from recyclable materials, the program facilitates next-generation dialogue by connecting tomorrow's leaders with today's decision makers. The city also hosted an additional 50 future-focused public presentations on sustainability, leveraged the collaborative resources of the partnership and conducted comprehensive staff training to support its reach of GHG reduction goals.

The San Diego Association of Governments
Setting the Standard for Regional Energy Management

A vital force behind San Diego's regional implementation of the California Energy Efficiency Strategic Plan, San Diego Association of Governments **(**SANDAG) leveraged its local government ***SANDAG Partnership with SDG&E*** to provide innovative energy assessments to its member municipalities. Now a statewide prototype, SANDAG's comprehensive energy roadmap provides user-friendly navigation and a one-stop shop for local governments seeking to fuel their sustainability efforts. it's a model approach to support cities that lack full-time energy management staff and have low or no participation in energy-savings programs. Through no-cost energy-efficiency and conservation outreach, planning, and technical assistance, the Partnership-funded program enabled San Diego's local governments to deliver significant energy savings that would not otherwise be captured. the program also provided training for these municipalities to support their future leadership in energy management through the development of dedicated government and community energy programs. The entire process has been instrumental in the evolution of regional energy management planning, making it a more actionable and effective initiative to achieve 2020 goals.

Getting More Mileage in Energy Use
SANDAG's energy roadmaps help local jurisdictions identify energy-savings opportunities in government operations and the community. It's a framework for making their buildings and

processes energy efficient, complying with state energy codes, and influencing energy-saving behavior among local residents and businesses. Recommendations are consistent with regional energy strategy and climate action plans and customized for turnkey integration into the city's general plan, codes and policies. SANDAG's initial efforts have focused on converting each city into an energy-management champion by working with them on plan creation and education, with the next phase dedicated to achieving energy savings.

Navigating Energy Savings

When local governments lead by example and improve their own energy efficiency, they spend fewer taxpayer dollars, contribute to cleaner air and reduce greenhouse gas (GHG) emissions. Through wide-ranging, cost-effective measures, energy roadmaps drive municipalities to pursue energy upgrades and retrofits in their facilities, demonstrate emerging energy technologies, green their vehicle fleets, promote commuter benefits and evolve environmental stewardship among employees. The process begins with free energy audits of government facilities to generate energy report cards that benchmark the performance of lighting, motors, heating, cooling, appliances, vending machines, electric signage, roofing, insulation, windows and shading, self-generation technologies and more. SANDAG performed 185 initial audits, plus 76 phase-two audits for deeper discovery. Support was provided to identify and help municipalities apply for ***SDG&E Energy Efficiency Business Incentives (EEBI)*** and participation in programs like ***SDG&E's On-Bill Financing program***, which provides zero-percent financing for new energy-efficient equipment. The program also includes access to online tools and experts who can assist municipalities with building improvements, petroleum reduction measures and community outreach.

Energy roadmap recommendations identified upwards of 1,000 therms of natural gas and well over three million kilowatt hours (kWh) in potential energy savings in hundreds of municipal structures, which could result in more than $469,000 in cost savings. An additional $452,600 in savings through energy rate changes for local sports parks revealed a source of capital that could be reinvested in energy upgrades and retrofits. Collectively, recommendations made across the 12 cities could result in an energy demand reduction of 468 kilowatts (kW).

Taking Energy Efficiency on the Road

Energy roadmaps further suggest strategies for community outreach that engage the city's residents, schools and businesses through access to energy-efficiency resources, programs, workforce training and incentives, as well as smart growth policies that encourage municipalities to pursue an environmentally-sensitive pattern of development.

All Roads Lead to Sustainability

The Partnership also supported SANDAG's development of a green operations manual as a reference guide for daily energy-efficiency best practices as well as the procurement and operation of energy-efficient equipment. The manual is used internally and is also available online at no cost for use by regional public agencies.

Tuning in to Energy Efficiency

Teaming up with a local news station, the partnership promotes energy efficiency and water conservation best practices through the Green Business Network. On-air success stories

broadcast savings tips while behind-the-scenes outreach helps energy-efficient businesses advance their savings through ***SDG&E's My Account,*** online energy management tool, further empowering San Diego residents to champion environmental stewardship through proper disposal of compact fluorescent bulbs.

Kyocera America, Inc.
Energized By a Powerful Corporate Philosophy

As a global company, Kyocera Corporation has a longstanding commitment to the ideals of social responsibility and sustainability. For the team at Kyocera America, Inc., transforming this corporate vision into reality has resulted in a comprehensive energy strategy that combines energy efficiency, demand response, renewable energy sources, and distributed generation. With the significant energy demands that come with being a 24/7 manufacturing operation, Kyocera America has found energy efficiency and generating its own energy critical to meeting the company's environmental charter and to its continued business success.

Optimizing HVAC Efficiency
In 2009, Kyocera began a comprehensive HVAC retrofit of half of its air handlers. The remaining units were completed in 2012. As part of this effort, the company installed updated HVAC controls, wireless stat sensors on DX units, variable frequency drives (VFD), and incorporated a Java Application Control Engine (JACE) building management system for remote monitoring and scheduling. With the ability to modulate air temperatures based on outside temperatures and change motor speed, facilities staff can remotely adjust HVAC operation and humidity levels to meet immediate demands. Kyocera America's Plant Operations Manager Drew Miller adds, "By being able to remotely monitor the condition of the HVAC system, we can take timely, corrective action to ensure optimal operation."

Strong collaboration between Kyocera America, SDG&E, and HVAC contractor A.O. Reed & Co. made this project possible. John Tanaka, Plant Engineering Manager for Kyocera America, explains, "We asked SDG&E to help us assess how much we could save. Then we worked with A.O. Reed & Co. on the installation and application for the incentive program." Kyocera America received an ***SDG&E's Energy Efficiency Business Incentive*** of $141,822 and was able to use the ***SDG&E's On-Bill Financing*** program to pay for the project with 0% financing. The biggest reward, however, has been the efficiency results — Kyocera America's new HVAC equipment has delivered over 2 million kWhs in annual electric savings, reducing the company's overall energy use by 10%. This also eliminated 888 metric tons of CO2 emissions.

Cooperation for Cogeneration
In addition to its efforts to save energy, Kyocera America also recognizes the importance of supplementing its supply. The company has a 235 kW photovoltaic array onsite, and in 2012 completed construction on a new 3.7 MW cogeneration facility. While Kyocera America had a 2.8 MW facility already in operation, the company wanted to replace this 17-year old facility to increase support of green power generation, further lower emissions, and reduce repair costs.

The project started in 2007 with a comprehensive feasibility study. After the project was

approved by Kyocera Corporation headquarters in Japan, construction was completed in August 2012, with operation starting immediately after that. According to Nathan Justice, the Kyocera America Plant Engineer who led the effort, "This was an extremely complex project with many entities that had to be coordinated." As a result of the new plant, the company has reduced NOx emissions by 16.7 tons per year.

Approaching Efficiency from Many Angles
By exploring energy efficiency from both the supply and demand sides, Kyocera America has made great progress towards sustainability and environmental stewardship. The company plans to continue these efforts by further improving the energy efficiency of its buildings through lighting upgrades, including LEDs and motion sensors.

UC San Diego
Striving for Excellence in Energy Efficiency

UC San Diego has the size and complexity of a small city with a campus that contains 11 million square feet of building space and an average daily population of more than 45,000. As a research and medical institution, many of the university's spaces have two times the energy density of a commercial office building. The driving forces behind UC San Diego's comprehensive energy-efficient efforts are lowering overall operating costs and reducing greenhouse gas emissions, in order to comply with Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006.

A key and essential element to the university's energy saving success is active participation in ***SDG&E's UC/CSU/IOU Partnership Incentive Program***. Anna Levitt, Assistant Energy Manager at UC San Diego explains, "It's the incentive levels that allow our whole energy-efficiency program to be financially possible."

Optimizing Performance Across Campus
Through monitoring-based commissioning (MBCx), UC San Diego is able to remotely monitor systems campus wide, ensure they are operating at maximum efficiency levels, and address unusual spikes in energy use. The university also migrated from constant volume (CV) to variable air volume (VAV), which manages airflow based on actual demand. This VAV upgrade included occupancy sensors and digital controls, which allow UC San Diego to save energy by lowering air exchange rates while maintaining safe levels of ventilation. The occupancy sensors automatically increase and decrease airflow on demand, while the new digital controls allow for remote management of temperature set points. "The new controls contribute to ongoing energy savings on nights and weekends, plus they make it easier to respond during a demand response event," states John Dilliott, Manager of Energy and Utilities at UC San Diego. The university's participation in demand response events is through ***SDG&E's Capacity Bidding Program***. UC San Diego uses data center load shedding to significantly drop energy levels during an event. This demand response practice involves the university stopping work at its super computer center, which has CPUs constantly running computational algorithms.

Another one of UC San Diego's energy saving measures included a campus-wide interior lighting upgrade which involved replacing approximately 100,000 T12 fluorescent lamps to the lowest 25 watt T8 bulbs. Levitt notes, "We were individually retrofitting lights as they went out, which would

have taken a long time to complete. Instead, the ***Partnership Incentive Program*** was able to fund 50% of the effort so we could complete the change out all at once. We were also able to install occupancy sensors to control lighting and save a huge amount of energy."

A Record Amount of Savings
In addition to the many energy-efficiency measures that the university recently implemented, UC San Diego's self- generating power initiatives are equally impressive. The university generates more than 85% of its own energy via a 30 MW natural gas co-generation power plant, 2.8 MW molten carbonate fuel cell and 1.2 MW solar photovoltaic (PV) on campus rooftops. UC San Diego's fuel cell generates energy using biogas, and is currently the biggest commercially available fuel cell on the market. UC San Diego is even working on adding energy storage to some of their systems to provide energy for both on- and off-peak periods.

UC San Diego's collective efforts have contributed to an annual energy savings of over 8,000,000 kWhs and over 300,000 therms. And, as part of a three-year-energy ***UC/CSU/IOU Partnership Incentive Program***, UC San Diego expects to yield a total of $7 million in energy savings, which includes $2.397 million in SDG&E incentives. Levitt adds, "Achieving such a significant level of energy savings was a huge collective effort involving everyone working together to lower operating costs and protect the environment."

Balboa Park Cultural Partnership
Working Together for Sustainability Success

Balboa Park is a San Diego landmark and one of the community's greatest treasures. As the park approaches its 2015 centennial, the Balboa Park Cultural Partnership (BPCP) is helping ensure sustainability is celebrated, as well. The group's environmental efforts started in 2008 as an educational program designed to teach facilities directors about greening their institutions. Since then, the BPCP has set a goal of making Balboa Park a sustainable urban park. By working with SDG&E, the group has achieved dramatic energy savings through a variety of programs. Comments Peter Comiskey, Executive Director of the Balboa Park Cultural Partnership,
"This collaboration is very exciting. We believe it's a unique model for achieving the green museum ideal."

Taking the LEED® in Energy Efficiency
Members of the BPCP participated in audits that identified lighting fixture, HVAC system, energy management system, and server virtualization improvements. The organizations qualified for $2.3 million through the American Recovery and Reinvestment Act (ARRA) to make these energy-efficiency upgrades. To build upon this, the BPCP coordinated another level of audits to uncover additional upgrades and meet the Park's goal of increasing LEED certifications from three to ten by 2015. During twenty-two building audits conducted through the Local Government Partnership program, seven potential LEED candidates were identified. Jessica Rinaman, Manager, Sustainability for the Balboa Park Cultural Partnership explains, "The audits identified what needed to be done. We then determined what could get done, and built a timeline to make it happen."

Fostering Sustainable Collaboration
The BPCP has also committed to education. Monthly facilities directors' meetings enable idea sharing and cooperation. By working together, a number of the organizations have been able to take advantage of ***SDG&E's Energy Efficiency Business Incentive*** program. As part of the ***SDG&E Capacity Bidding Program***, the Reuben H. Fleet Science Center and the Museum of Photographic Arts have made great strides in reducing energy use and shedding load during critical events. Many institutions also work with the ***SDG&E Emerging Technologies*** program to install and test new technologies to find those best suited to museums.

Trade professionals play a key role in BPCP'S efforts. Lighting designer and electrical contractor Absolutely Electric has become a go-to resource for innovative, energy-efficient lighting solutions for unique gallery spaces. For HVAC, A.O. Reed & Co. and Alpha Mechanical have uncovered new technologies and coordinated participation in ***SDG&E's On-Bill Financing, Energy Efficiency Business Incentives, and Energy Efficiency Business Rebates*** for various Balboa Park organizations. This has resulted in $126,482 in SDG&E incentives.

On the Right Track with Renewable Energy
Balboa Park has also explored a number of renewable energy sources. The photovoltaic installation on the roof of the Fleet Science Center is a model for integrating new technologies in a historic design. Because Balboa Park is a National Historic Landmark District, solar installations cannot be visible. The Fleet implemented a discreet installation with a live-feed into an educational exhibit. There are also a number of electric vehicle (EV) charging stations in the Park, including the new solar trees erected in the zoo parking lot that provide shade for parking and EV charging through the ***SDG&E Sustainable Communities program***.

From retrofits to renewable energy, BPCP has made dramatic inroads in creating a sustainable urban park. Every institution has completed some sort of energy conservation effort.
With over 1 million kWhs and over 7,000 therms of new annual savings in 2012, the Park is on track for a greener future. With its commitment to continued improvement, the Balboa Park Cultural Partnership has set the stage for a sustainable 2015 centennial celebration.

BioMed Realty
Building Brand Differentiation through Energy Efficiency

In biotech office and laboratory facilities, BioMed Realty has found that doing the right thing often sets its properties apart. Across the company's extensive portfolio, it uses energy efficiency as a differentiator and a way to lower costs to its tenant customers. Achieving this goal is no small feat given the unique needs of BioMed Realty's target market. The nature of its tenants' work makes energy-efficiency retrofits more complex. With the integration of lab space, these buildings often operate 24/7 and frequently require single-pass air and multiple air changes. Despite these factors, BioMed Realty is committed to making energy-saving updates that deliver long-term benefits to both its clients and the environment. Working with SDG&E, the company has been able to take advantage of impactful programs to improve energy efficiency.

Relying on Retrocommissioning Support

When the old Mission Bay Hospital in Pacific Beach was converted to biotech use, one of the challenges was energy consumption. As part of the ***SDG&E Retrocommissioning (RCx) program***, BioMed Realty worked with third-party energy consultant PECI to identify potential efficiencies. PECI also completed required paperwork and kept the project on track. The process started with an evaluation during the summer of 2012 and an internal justification for the investment. BioMed Realty is a publicly traded company, which means there are a number of channels these types of projects have to go through. Even though it is a complex process, BioMed Realty constantly learns about innovative technologies, collaborates with SDG&E, and tries new things.

When a last-minute space became available in the ***RCx program*** for 2012, BioMed Realty had to act quickly to complete all work by December. SC Engineers was the engineer of record for these measures and did the full field investigation to validate savings. All installations were done by HVAC contractor Pac Rim, a long-standing BioMed Realty partner.

Retrofits That Delivered Real Savings

BioMed Realty made a number of improvements as part of the retrocommissioning effort at the property, including retrofitting the mechanical system to provide a modified night setback to reduce heating and cooling loads. While occupied, the labs require a certain number of air changes for ventilation purposes. The audit uncovered the opportunity to reduce the number of airflow exchanges by using occupancy sensors to determine use during off-hours. Retrofits were also done to change chilled and hot water pumping systems from constant to variable volume, schedule boiler operation for non-peak times, and update and repair leaks in the steam piping system. At its John Hopkins Court property, BioMed Realty also converted from constant air volume (CAV) to variable air volume (VAV). Many of these efforts were supported through the ***SDG&E Energy Efficiency Business Incentives*** program. Through its collaboration with SDG&E and the resulting improvements, BioMed Realty and its tenants have realized an annual savings of over 800,000 kWhs and 70,000 therms, and received $174,264 in incentives.

Enabling an Energy Efficiency Mindset

With energy efficiency a key objective for BioMed Realty, ensuring its staff has both expertise and a commitment to the cause is critical. The company undertakes a variety of efforts to raise energy-efficiency awareness, including education and certification for those in the field and at the properties. The company uses ENERGY STAR® EPA Portfolio Manager to proactively manage energy use by benchmarking properties and identifying how they compare to others in the portfolio. BioMed Realty also participates in the ***SDG&E Critical Peak Pricing program*** when possible by adjusting accent lighting and other non-critical energy systems and also by notifying tenants of peak events and requesting their support. For BioMed Realty, every energy-efficiency effort enhances its market differentiation.

Kaiser Permanente
A Healthy Dose of Energy Efficiency

Efficiency and effectiveness are hallmarks of the care Kaiser Permanente provides its members. The company also applies these values to its facilities. Kaiser has committed to an annual reduction in energy consumption and carbon footprint for both environmental and economic reasons. According to Bob Crowl, Director of Facilities Operations for Kaiser Permanente San Diego, "Across the entire organization, the goal is to reduce greenhouse gas emissions by 30% and energy intensity (kBtu/sf) by 20% by 2020." In San Diego, Kaiser has made great strides in reaching these sustainability goals through its work with SDG&E. As the organization updates its facilities, it continues to take advantage of programs like ***SDG&E Energy Efficiency Business Rebates*** to green its operations.

A Prescription for Sustainability and Conservation
Renewable energy has been a major focus for reducing use at Kaiser Permanente. Building on the success of its 1 MW photovoltaic installation at the La Mesa Medical Office, a new system was added to the parking structure at the San Diego Medical Center in 2012. Kaiser also installed a 300 kW fuel cell at its San Marcos Medical Office building. All of the energy generated by these installations is consumed onsite.

Participation in the ***SDG&E Critical Peak Pricing*** program was another of Kaiser's energy-saving strategies. During peak events, the company reduced lighting use and increased temperature set points in facilities. For future peak events, Kaiser plans to continue voluntarily reducing its use in ways that do not impact patient care.

A HEEP of Help
To identify new energy reduction opportunities, Kaiser took advantage of a no-cost audit of its facilities through the ***SDG&E Healthcare Energy Efficiency Program***. Kaiser Permanente worked with GalexC to evaluate their facilities for potential energy-saving actions. As the program coordinator, Willdan Energy Solutions managed the administrative aspects of the incentive and rebate programs. Kaiser was able to use the ***SDG&E On-Bill Financing program*** to cost-effectively make these changes. They also qualified for $188,335 in SDG&E incentives.

Based on the audits, Kaiser implemented retrofits in a number of its facilities in 2012 that resulted in new annual savings of over 1 million kWhs and 6,000 therms. This included upgrading interior and exterior lighting to LEDs, updating from 32W T8 lamps to 25W high-efficiency lamps and ballasts, and adding sensors to vending machines that power them down when the surrounding area is vacant. Kaiser also converted HVAC units from constant air volume (CAV) to variable air volume (VAV), integrated controls to take advantage of outside air temperatures, and added demand control ventilation and demand response capabilities to HVAC units. The team began exploring scheduling equipment operation to match occupancy by adjusting temperatures and exhaust fans, and expects to expand this to boiler operations.

Checking Up On Energy-Efficiency Readiness
Educating its staff about the latest energy-efficiency topics is a key strategy at Kaiser Permanente. “Our National Facilities Services organization is very involved in our energy program, providing funding and resources to educate our local energy managers,” adds David McIntosh, Operations Manager for Kaiser Permanente San Diego. The company sponsors classes for energy managers, offers extensive training for technicians, and also regularly sends its staff to SDG&E workshops.

Strong staff support is critical as the team plans to move forward with the comprehensive list of energy-efficiency opportunities developed in its analysis, including chilled water optimization controls, transitioning pole lighting to induction options, and replacing fan motors with electronically commutated motors (ECMs).

NOAA
Applying Smart Science to Sustainable Construction

When constructing a replacement for its Southwest Fisheries Science Center (SWFSC) Laboratory in La Jolla, the National Oceanic and Atmospheric Administration (NOAA) prioritized sustainable design. With funding from the American Recovery and Reinvestment Act, NOAA was able to rebuild across the street from its previous location. With its unique Ocean Technology Development Test Tank, laboratories, specimen archives, libraries, and office space for 275 NOAA and Inter-American Tropical Tuna Commission scientists and support staff, the new SWFSC building is a showcase for smart development. While laboratory buildings pose unique challenges for energy savings due to their stringent environmental controls, the new facility has integrated a range of green building and energy-efficiency advances that NOAA will showcase through its website, tours, and brochures.

A Deep Dive into Green Design
Exploring how sustainable the new building could be started early in the planning process. The architecture and engineering teams worked closely with SDG&E to identify energy-saving solutions that reduce demand and diminish lifecycle costs. Lily Livingston, Sustainable Design Project Manager for HDR Architecture notes, “We conducted a sustainability summit to help solicit and analyze options for incorporating energy savings.” Through its collaboration with the ***SDG&E Savings by Design program***, the new building is targeted for LEED Gold certification, a rare accomplishment for a laboratory building which typically has high energy requirements.

On average, labs consume about five times more energy per square foot than a typical office building. To offset this, the SWFSC Laboratory incorporates innovative design features such as narrow floor plates and natural day lighting from two or more sides, fan-assisted natural ventilation, and high-efficiency equipment and lighting. By incorporating a green roof planted with California coastal chaparral and shading west- and south- facing windows, the building requires 69% less cooling energy than the ASHRAE 90.1-2004 standard. Altogether, the improvements reduce projected energy use by 33% compared to similar buildings. Sarah Mesnick, Ecologist and Science Liaison, Southwest Fisheries Science Center, NOAA Fisheries Service highlights another important benefit, “Our staff will thrive with the

combination of fresh air and natural light in their offices, as well as the open spaces which promote interaction, creating both a wonderfully healthy and scientifically productive place to work."

Casting a Wide Technology Net
NOAA worked closely with the ***SDG&E Emerging Technologies*** department to explore new energy-saving advances. Lighting was an important area for increased building efficiency. The SWFSC Laboratory parking lot includes LED lights with advanced lighting controls. Lighting is kept at a minimum level until pedestrian or vehicular movement activates brighter lighting levels. The office and laboratory spaces also have motion and light photo sensors for reducing the use of artificial light and a building management system, which allows the facilities staff to monitor energy usage and make energy-saving operational changes where appropriate.

A Strong Renewable Energy Plan
The building includes a large, rooftop photovoltaic array that supplies 7% of its energy needs. This is the equivalent of powering 40 typical homes. Because it is highly visible to anyone passing by, the array also serves another purpose. In addition to its functional use, the photovoltaic array communicates a strong commitment to alternative energy sources and encourages others to enter the building, seek information about sustainable building design and follow our lead. As a result of all of the energy-saving initiatives incorporated into the building, NOAA received $211,794 in SDG&E incentives and achieved projected annual savings of over 900,000 kWhs and 3,000 therms. The new Southwest Fisheries Laboratory embodies NOAA's efforts to promote sustainability as seen in their projects and research.

SD County Regional Airport Authority
Taking Sustainability to New Heights

Throughout its operations, the San Diego County Regional Airport Authority has taken a leadership role in environmental stewardship. In 2008, the organization adopted a Sustainability Policy which formalized its dedication to this ideal. This document commits the Authority to operating the San Diego International Airport in full alignment with the values of economic viability, operational excellence, natural resource conservation, and social responsibility. As a result, all new construction or major renovations must be certified LEED Silver or better, ground transportation vehicles are being converted to clean air vehicles, and SAN is the first airport in the country to issue a sustainability report using the Global Reporting Initiative (GRI). This illustrates how environmental consciousness touches every aspect of the Authority's operations.

Green Construction Takes Flight
The Airport Authority's recent construction projects demonstrate the agency's strong commitment to minimizing environmental impact. The $1 billion Green Build terminal expansion is the largest improvement project in San Diego airport history. Scheduled for completion in 2013, the Green Build includes 10 new gates to reduce terminal congestion, enhanced curbside check-in, a dual-level roadway separating arrival and departure passengers

to relieve traffic, more security lanes for improved passenger flow, and expanded concession areas.

Through its work with the ***SDG&E Savings by Design program***, this LEED Silver-certified effort incorporates energy- efficient solutions with projected annual energy savings of over 1.4 million kWh and more than $450,000. The Authority is currently adding a solar component and the project also includes 20 electric vehicle (EV) charging stations. The Airport Authority has continued this green construction tradition with the new Receiving and Distribution Center (RDC), which incorporates a solar hot water system and is the first LEED Gold-certified RDC in the world. The Authority also received LEED Gold for redevelopment of its Facilities Management Building.

Upgrading Facilities for First-Class Energy Efficiency
The Airport Authority participated in the ***SDG&E Retrocommissioning program*** to update its older terminal and central plant to enable performance on par with the newly constructed Green Build facilities. This effort began with an energy-efficiency audit by Jacobs Engineering who brought technical savvy and strong creative problem solving to the task. The Authority then worked with PECI, the coordinator of the RCx program for SDG&E, to implement the retrofits. By starting with the most cost-effective projects that offered the quickest ROI, the Authority was able to prove the concept and provide savings that could fund other efforts. SDG&E helped the Airport Authority explore new technologies and provided rebates and technical assistance with these upgrades.

A Soaring Example of Sustainable Operations
In February 2012, the San Diego International Airport became the first commercial airport in the nation to install LEDs across its airfield. The Airfield Lighting Improvement Project transitioned 119 airfield signs, 410 taxiway lights, and runway guard lights to energy-efficient LEDs. This has lowered the airport's electricity costs by $27,000 per month. The Authority has also reduced the airport's carbon footprint by using 14 electric vehicles for onsite travel. Altogether, its energy conservation efforts have resulted in over 3 million kWhs and 11,000 therms in annual savings and qualified for $205,412 in SDG&E incentives. As the airport looks for new ways to reduce its impact on the grid, it is exploring the possibility of a cogeneration plant. The Airport Authority takes a holistic approach to its energy efficiency and earth-friendly practices. Their 'Green Build' and retrocommissioning efforts are testament to this. Bryan Enarson, Vice President of Development for the San Diego County Regional Airport Authority adds, "Airports help make our world more interconnected. That's why we believe we have a great responsibility to be ever more sustainable."

Sweetwater Union High School District
Earning High Marks in Energy Efficiency

For Sweetwater Union High School District, every dollar saved through energy efficiency is another dollar available to invest in the classroom. Economic realities have reduced the district's general fund by a third over the past five years, so any operational improvements that relieve budget strain are critical. This is why the district has made a strong commitment to sustainability and energy efficiency. Through a variety of SDG&E programs, Sweetwater has updated major equipment systems and implemented renewable energy sources, which have

resulted in significant savings. As Tom Calhoun, Chief Facilities Executive for Sweetwater Union High School District put it, "The less we pay for energy, the more we can do for our students." With this powerful motivation, the district has set the aggressive goal of reducing the cost of its energy bills by 25%. It also has plans to transition approximately one third of the district to photovoltaic power. This is an overall cultural change in the district. It's just how they work now.

Upgrades Earn an "A" in Energy Efficiency

During 2012, the Sweetwater Union High School District updated both HVAC and lighting systems to set the stage for ongoing energy savings. Through the ***SDG&E Savings by Design program***, the district upgraded aging HVAC equipment to more efficient models. In addition to reducing energy usage, this migration also lowers the district's ongoing maintenance costs as a result of newer, simpler, and more cost-effective equipment. The district was also able to take advantage of the ***SDG&E Commercial Direct Install program*** to update classroom lighting at many school sites. In addition to switching to more efficient bulbs, occupancy sensors were also added to automatically turn lights off when classrooms are empty. The district received $608,615 in incentives from SDG&E and additional savings were enabled through the California High Performing Schools program.

To continue this energy saving success, Sweetwater has already begun investigating LED lighting and implementation of photo sensors. With this capability, lights can be automatically dimmed when sufficient outside light is available. These improvements also lay the groundwork for increased energy efficiency in the $500 million worth of new construction in coming years.

Savings Add Up with Ongoing Programs

Beyond lighting and HVAC, the district's facilities team has found other ways to encourage energy efficiency. With its implementation of desktop management software on 4,000 PCs, the team was able to combat energy waste by automatically powering down computers that were on, but not in use. Sweetwater also participates in ***SDG&E's Critical Peak Pricing program*** at a number of school sites and its district offices, which has led to a savings of 10% on its electric bill.

Reading, Writing, and Renewable Energy

Renewable energy is a key focus of the district's energy- efficiency efforts. During 2012, Sweetwater installed 3.3 MW at 6 sites, with plans for 17 more sites and a total of 6.8 MW. The arrays installed in school parking lots provide multi-layered benefits including reduced electric use, lower energy costs, and shade for staff and student cars. These six photovoltaic installations currently cover 10% of the district's total peak load, with plans to increase this to a third. This will result in a net savings of $7.9 million to the district. The solar panels have been very big successes and in some sites they have been able to generate up to 80% of the site's electrical usage.

Sweetwater's efforts have resulted in over 3 million kWhs and 2,000 therms saved annually. For a school district, Sweetwater is very cutting edge. They have a plan and are following through to advance energy efficiency. The most exciting result of this is the direct impact

these energy-efficiency efforts will have on students. For Sweetwater, the math is simple: more energy savings equals more money available for education.

Vulcan Materials Company
Paving the Way for a Greener Future

As a business that depends on natural resources, Vulcan Materials Company understands the importance of sustainability. The company is committed to community involvement and to doing its part for the environment. According to Tom Lavera Vulcan Materials Company's General Manager and Plant Manager for Otay Mesa, "Being a responsible member of the communities where we work is one of our key goals." With its new, highly energy-efficient asphalt production plant in Otay Mesa, Vulcan has taken its commitment to safety, health and environmental stewardship to new heights. As a result of the energy-savings measures implemented, the company had the largest gas-savings project by an SDG&E customer in 2012 and is now saving approximately $300,000 per year in energy costs.

Driving Energy Efficiency from the Outset
The new Otay Mesa plant was built to replace a 40-year-old plant in Mission Valley. As part of the five-year planning process, Vulcan worked closely with SDG&E to integrate energy efficiency into the design and equipment selection, which ultimately qualified for $259,653 in incentives through the ***SDG&E Savings by Design program***. In an industry that isn't particularly science- or technology- driven, Vulcan is at the forefront of implementing the most up-to-date, high-efficiency equipment. By bringing SDG&E in early in the process, they were able to enjoy savings for a long time to come. Vulcan also uses this plant as a blueprint for other locations. Vulcan is taking what they learned in designing this plant and are now applying it to our other plants throughout California.

New Technology for Natural Gas Savings
With its new Double Barrel asphalt drum and dryer from Astec Inc., Vulcan can produce asphalt at a lower temperature. This advanced equipment incorporates a hot-oil burner economizer and external hot pipe insulation to increase efficiency. The company also installed a stack pack, which captures the hot gases from production and re-circulates the heat back into the system, as well as state-of-the-art computerized controls. Vulcan's goal was to operate at the peak performance of the equipment they purchased. They have found that lots of little efficiencies add up. In fact, these enhancements save over 250,000 therms annually.

The Astec equipment also offers advantages for Vulcan's customers. The new drum incorporates emerging technologies such as a green injection water system to reduce the viscosity of the material. Instead of relying on heat, which also releases volatile organic compounds (VOCs) from the oil, they now inject water, which keeps the temperature lower and eliminates the need to add chemicals. This improves the asphalt performance, makes it more workable, and reduces inhalation of VOCs by workers at the job site.

Adding Up Electricity Savings
In addition to reducing natural gas usage, Vulcan also wanted to lower power use at the new plant. To accomplish this, the company installed variable frequency drives (VFD), as well as

high-efficiency motors and burners. To ensure lighting was only on when necessary, Vulcan implemented lighting controls that turn lights on only when the conveyor is put into motion. These changes resulted in an annual savings of over 55,000 kWhs.

To further its energy savings, Vulcan also participates in ***SDG&E's Critical Peak Pricing program*** as well as other demand bid opportunities when possible. This is a clear reflection of the company's commitment to taking a longer-term view. For Vulcan, this is a point of pride and differentiation. Most companies in the industry are reactive. At Vulcan, they are very proud of the fact that they take a proactive approach. The collaboration between SDG&E, our engineers and our vendors has brought energy efficiency to the forefront of what we are doing.

Program Descriptions and Strategies

SDGE3100 SW-AgA - Calculated Narrative

The Agricultural Calculated Incentive Program offers incentive payments for energy efficiency projects involving the installation of new, high-efficiency equipment or systems. A project may consist of the retrofit of existing equipment/systems or the installation of equipment associated with new or added load.

Working with the SDG&E Account Executives, SDG&E Vendor Allies and various business associations continues to be the best way to promote our program, especially to larger customers.

The re-introduction of the Program Advisory Group and the Vendor Forums played a critical role in the revamping of the Energy Efficiency Business Incentive program. Quantitative and qualitative data was collected from both groups regarding lessons learned and suggestions for new programs. This additional outreach to customers and vendors allowed SDG&E to introduce new and innovative ideas that the market will sustain in 2013.

SDG&E staff also reached out to the San Diego County Farm Bureau to collaborate on program outreach and identifying program barriers. SDG&E plans on further improving collaboration efforts in 2013.

In addition, On Bill Financing (OBF) allows customers to complete energy efficiency projects that would otherwise be out of their financial means. Since OBF allows for the project to be paid for from monthly energy bills it does not affect the customer's operating budget to any great extent.

Agricultural industry in San Diego has been adversely impacted by the recent droughts, increasing water rates, crop infestations and competition from foreign producers. The number of agricultural sites in San Diego continues to decline due to the aforementioned reasons.

The San Diego agricultural industry is encountering major challenges. SDG&E has initiated outreach efforts to agricultural customers in its service territory with the goal of improving program uptake. Staff within the Calculated Program will work in tandem with the Pumping Efficiency Testing program to identify additional customers in 2013. Also, incentive rates for agricultural pumps will also be increased in 2013 in an effort to increase participation in the program.

SDGE3101 SW-AgB - Deemed Narrative

The Agricultural Deemed Rebate Program offers rebates to customers in an easy to use mechanism to offset the cost of off-the-shelf energy saving equipment.

Working with the Account Executives, Vendor Allies and various business associations continues to be the best way to promote the program, especially to larger customers.
In addition, On Bill Financing (OBF) allows customers to complete energy efficiency projects that would otherwise be out of their financial means. Since OBF allows for the project to be paid

for from monthly energy bills it does not affect the customer's operating budget to any great extent.

The major barrier that has been common to all programs is the economic downturn. Most customers do not have extra money to spend on improvements or energy efficiency upgrades.

There were no major design changes to the Energy Efficiency Business Rebates (EEBR) program.

The program did not meet its therm goal in 2011. The slow economy has played a role in not achieving the therm goal.

SDGE3102 SW-AgC - Nonresidential Audits Narrative

The Statewide Agricultural Audits sub-program includes Basic Audits, Integrated Audits, and Retro-Commissioning audits, which provide an inventory of technical project opportunities and financial analysis information to customers.

The strategy was to address the potential in these markets, the Statewide Agriculture Program includes five core Statewide Sub-Programs: Non-Residential Audits, Calculated support, Deemed rebates services and incentives, Continuous Energy Improvement, Pump Efficiency Services

These segments were approached through Commercial &Industrial (C/I) support engineers, on-line audits, third party audits and Technical Assistance &Technical Incentive (TA/TI) audits. SDG&E continued to work towards an integrated audit that crosses all of these lines and have made strides towards a standardized tool and approach.

The economic downturn continues to be the major factor for increasing audit saturation.

Program objectives have been met and all audits offered were completed. SDG&E's C/I auditors use an internal tracking system to document all audits performed. Per contract key performance indicators, the third party programs (on-line audit and comprehensive audit program) generate monthly reports that provide tracking achievements.

SDGE3103 SW-AgD - Pump Test & Repair Narrative

The Pump Test and Repair Sub-Program aims to overcome key informational, technical, and financial barriers to pump optimization by offering pump tests, repair incentives, and targeted education, training and technical support for customers and pump companies.

A request for proposal process was conducted to identify a third party contractor to implement the program beginning in 2011. See program SDGE3164 Energy Efficient Water Pumping.

SDGE3104 SW-AgE - Continuous Energy Improvement Narrative

The Continuous Energy Improvement (CEI) Program is a program implemented by Enovity, Inc., through a contract with San Diego Gas and Electric Company (SDG&E). This demonstration phase program ran through the 2010 – 2012 Program Cycle. Although this is a part of SDG&E's core program, Enovity designed and is implementing the program. The objective is to steward combination of six commercial, industrial, and/or agricultural customers of SDG&E through at least one full cycle of the established CEI process of Commitment, Assessment, Planning, Implementation, Evaluation, and Modification. The CEI approach differs from traditional energy management in that it emphasizes strategic planning, encourages organizations to commit to energy management at every level, and provides a structure for continuous measurement and modification to keep the organization's energy management initiative on track. The goal of this program is to help customers make the organizational and facility adjustments necessary to fully incorporate CEI into their corporate culture, ultimately resulting in deeper demand-side management (DSM) impacts. Enovity will assist customers through one cycle of the CEI process and leave the customer with training, tools, and a framework for which they will be able to carry on the practices of CEI on their own.

SDG&E's customer base did not have any qualified agricultural customers that expressed interest in the program within the recruitment period. There were no agricultural customers in the program in 2012.

An evaluation has been started by an outside consulting firm to evaluate the overall success of the pilot program. Currently, the program is measured based on customer achievement of milestones. No customers in the program have reached the milestone of completing an energy plan at this time.

SDGE3105 SW-ComA - Calculated Narrative

The Commercial Calculated Incentives Program offers standardized incentives for customized and integrated energy efficiency retrofit projects while also providing technical assistance. Unlike the rebate program, incentives are based on site specific calculated energy savings and may vary from one site to another. The Program also offers a peak reduction incentive based on the Database on Energy Efficient Resources (DEER).

Targeted end users include all commercial sub-segments such as distribution warehouses, office buildings, hotels, motels, restaurants, schools, trade schools, municipalities, universities, colleges, hospitals, retail facilities, entertainment centers, and smaller customers that have similar buying characteristics.

Working with the SDG&E Account Executives, SDG&E Vendor Allies and various business associations continues to be the best way to promote our program, especially to larger customers.

In many cases, On Bill Financing (OBF) was a critical factor in proceeding with energy efficiency projects. Since OBF allows for the project to be paid for from monthly energy bill savings, customers see minimal impact on their current operating budgets.

The re-introduction of the Program Advisory Group and the Vendor Forums played a critical role in the revamping of the Energy Efficiency Business Incentive program. Quantitative and qualitative data was collected from both groups regarding lessons learned and suggestions for new programs. This additional outreach to customers and vendors allowed SDG&E to introduce new and innovative ideas that the market will sustain in 2013.

The program exceeded its savings goals for kWhs and kWs in 2012.

SDGE3106 SW-ComB - Deemed Narrative

The Commercial Deemed Rebate Program (EEBR) offers rebates to customers in an easy to use mechanism to offset the cost of off-the-shelf energy saving equipment.

Working with the Account Executives, Vendor Allies and various business associations continues to be the best way to promote our program, especially to larger customers.

On Bill Financing (OBF) allows customers to complete energy efficiency projects that would otherwise be unable to afford. Since OBF allows for the project to be paid for from monthly energy bills it does not affect the customer's operating budget to any great extent.

The major barrier that has been common to all programs is the economic downturn. Most customers do not have extra money to spend on improvements or energy efficiency upgrades.

The benchmarking requirement presented a challenge to both customers and the EE programs. This cycle SDG&E has the requirement for customers to provide base case information on all lighting projects for saving purposes. Both of these new requirements created some frustration with customers and vendors.

EEBR exceeded its kW and kWh savings goals, but did fall short in the area of the therms savings goal. The higher costs of gas equipment and the slow economy played a role in not achieving the therm goal. Also, as the success of the electric savings goals increased, the interactive effect on therms also increased. Due to these interactive effects, the therm savings were reduced. During this time SDG&E did not offer natural gas rebates. There were no major changes to the EEBR program in 2012.

SDGE3107 SW-ComC - Nonresidential Audits Narrative

The Program is designed to offer Basic Audits, Integrated Audits, and Retro Commissioning Audits, which provide an inventory of technical project opportunities and financial analysis information.

These segments were approached through Commercial & Industrial support engineers, on-line audits, third party audits and Technology Assistance/Technology Incentives (TA/TI) audits. SDG&E continued to work towards an integrated audit that crossed all of these lines.

The economic downturn continues to be the major factor for the demand of audit results. Clients are searching for other investment opportunities. The program objectives were met by completing projected number of audits for the year.

SDGE3108 SW-ComD - Continuous Energy Improvement Narrative

The Continuous Energy Improvement (CEI) Program is a program implemented by Enovity, Inc., through a contract with SDG&E. This is a demonstration phase program that will run through the 2010 – 2012 Program Cycle. Although this is a part of SDG&E's core program, Enovity designed and is implementing the program. The objective is to steward six commercial, industrial, and/or agricultural customers of SDG&E through at least one full cycle of the established CEI process of Commitment, Assessment, Planning, Implementation, Evaluation, and Modification. The CEI approach differs from traditional energy management in that it emphasizes strategic planning, encourages organizations to commit to energy management at every level, and provides a structure for continuous measurement and modification to keep the organization's energy management initiative on track. The goal of this program is to help customers make the organizational and facility adjustments necessary to fully incorporate CEI into their corporate culture, ultimately resulting in deeper demand-side management (DSM) impacts. Enovity will assist customers through one cycle of the CEI process and leave the customer with training, tools, and a framework for which they will be able to carry on the practices of CEI on their own.

Two commercial customers actively entered the program. The first completed the Assessment phase and the deliverables were well received. Due to competing business interests (focus on opening new stores), the customer elected not to continue with the program.

The second customer completed the Assessment phase and was enthusiastic about the results of both the organizational and technical assessments. Changes in the customer's business focus (towards the construction of new facilities) led them to discontinue their participation as well. The program is designed around the "plan-do-check-act" cycle of continuous improvement. By its nature, it requires a reasonably long time commitment. With this requirement for longer time frame comes the risk that the focus and/or leadership and management of the participating organization can change, and this can lead to a change in the organization's priorities for assigning resources, both capital and staff.

During the period that these customers participated, they received information for energy efficiency opportunities that can be implemented at multiple facilities within their organizations. For the phases that the customers were active, they met their short term milestones. Overall, the program benefitted from the experience of evaluating commercial building portfolios in contrast to single-facility participants.

SDGE3109 SW-IndA - Calculated Narrative

The Industrial Calculated Incentives Program offering provides standardized incentives for customized and integrated energy efficiency retrofit projects. Unlike the rebate program, incentives are based on site specific calculated energy savings and may vary from one site to another. The Program also offers a peak reduction incentive based on the Database on Energy Efficient Resources (DEER). Targeted end users include all industrial sub-segments such as manufacturing facilities, laboratories and refineries.

The re-introduction of the Program Advisory Group (PAG) and the Vendor Forums played a critical role in the revamping of the Energy Efficiency Business Incentive program. The PAG is comprised of volunteers from the public and private sector. Quantitative and qualitative data was collected from both the PAG and the Forum regarding lessons learned and suggestions for new programs. This additional outreach to customers and vendors allowed SDG&E to introduce new and innovative ideas that the market will sustain in 2013.

In addition, On Bill Financing (OBF) allows customers to complete energy efficiency projects that would otherwise be out of their financial means. Since OBF allows for the project to be paid for from monthly energy bills it does not affect the customer's operating budget to any great extent.

Unlike the Commercial program, the Industrial program did not exceed its goals, because of the limited number of industrial customers in the SDG&E service area relative to the other Investor Owned Utilities (IOUs). SDG&E's service area lacks the large refineries and manufacturing sites that contribute to savings goals in other IOU service areas.

SDGE3110 SW-IndB - Deemed Narrative

The Industrial Deemed Rebates Program offers rebates to customers in an easy to use mechanism to offset the cost of off-the-shelf energy saving equipment.

Working with the Account Executives, Vendor Allies and various business associations continues to be the best way to promote our program, especially to larger customers.

On Bill Financing (OBF) allows customers to complete energy efficiency projects that would otherwise be out of their financial means. Since OBF allows for the project to be paid for from monthly energy bills it does not affect the customer's operating budget to any great extent.

The major barrier that has been common to all programs is the economic downturn. Most customers do not have extra money to spend on improvements or energy efficiency upgrades.

The program did not meet its energy savings goals. Some of it is due to the fact that our service territory has very little in the way of industrial customers to make a big impact on the goals. The slow economy has also played a role in not achieving the goal. Another impact on not meeting the gas savings goal was the transfer of Energy Efficiency Gas Surcharge Funds to the General Fund. During this time SDG&E did not offer natural gas rebates or incentives.

SDGE3111 SW-IndC - Nonresidential Audits Narrative

The Nonresidential Audits sub-program includes basic audits, integrated audits, and retro-commissioning audits, which provide an inventory of technical project opportunities and financial analysis information to customers.

The strategy was to address the potential in these markets, the Statewide Agriculture Program includes five core Statewide Sub-Programs: Non-Residential Audits, Calculated support services and incentives, Deemed rebates, Continuous Energy Improvement, and Pump Efficiency Services.

These segments were approached through commercial and industrial support engineers, on-line audits, third party audits and technology assistance/technology incentives audits. SDG&E continued to work towards an integrated audit that crosses all of these lines and have made strides towards a standardized tool and approach.

The economic downturn continues to be the major factor for the demand of audit results. Clients are searching for other investment opportunities. Program objectives were met for the projected number of audits planned for completion.

SDGE3112 SW-IndD - Continuous Energy Improvement Narrative

The Continuous Energy Improvement (CEI) Program is a program implemented by Enovity, Inc., through a contract with SDG&E. This is a demonstration phase program that will run through the 2010-2012 program cycle. Although this is a part of SDG&E's core program, Enovity designed and is implementing the program. The objective is to steward six commercial, industrial, and/or agricultural customers of SDG&E through at least one full cycle of the established CEI process of Commitment, Assessment, Planning, Implementation, Evaluation, and Modification. The CEI approach differs from traditional energy management in that it emphasizes strategic planning, encourages organizations to commit to energy management at every level, and provides a structure for continuous measurement and modification to keep the organization's energy management initiative on track. The goal of this program is to help customers make the organizational and facility adjustments necessary to fully incorporate CEI into their corporate culture, ultimately resulting in deeper demand-side management (DSM) impacts. Enovity will assist customers through one cycle of the CEI process and leave the customer with training, tools, and a framework for which they will be able to carry on the practices of CEI on their own.

Two industrial customers were recruited into the program and are scheduled to complete a full cycle of the CEI process by the end of the 2010-12 program.

- The internal teams established by the customer remained engaged throughout the process, representing all areas of the organization including the highest manager at the facility.
- The organizational improvements recommended at the start of the program were implemented, and change has taken place regarding the planning and implementation of energy projects as well as other energy related areas.

- The customers implemented an internal awareness campaign to educate their staff about energy goals, energy use in the facility, and efficiency opportunities.
- Energy efficiency opportunities were identified, and a Strategic Energy Management Plan devised for each customer that provides a roadmap for funding and implementation of these projects. The customers have coordinated these plans with their internal and corporate capital planning processes so they can achieve their energy and sustainability goals.
- Each of the customers has begun implementing energy projects that were identified as a part of the program, and plans to continue implementing the remainder of the projects according to their plans.

The staff in each organization is challenged to focus on developing an energy efficiency program along with all of the business concerns within their organization. The program has provided an external facilitation that allows the available time to be utilized effectively. Customers have expressed satisfaction that their efforts have resulted in actionable plans rather than generalized recommendations that they would struggle to implement.

The two industrial customers participating in the program achieved the short term milestones and completed an energy plan, thereby reaching the goals established at the outset. Additionally, although the program is non-resource, each customer implemented energy projects realizing measurable savings. Customer surveys will be completed by each customer at the end of the program providing feedback for improvement.

SDGE3113 SW-ResA - Residential Basic Lighting Narrative

The Residential Basic Lighting Program provides incentives to end-use consumers in the form of price reductions on energy efficient bare spiral compact fluorescent light bulbs (CFLs) up to and including 30 watts. An upstream delivery mechanism is used in which lighting manufacturers work with retailers all over the utility territory to stock and sell the products. Manufacturers and retailers reduce the regular retail price by at least the amount of the utility incentive so 100%goes to the consumer. SDG&E then reimburses the manufacturer for the incentives they passed on to their customers.

During 2012, SDG&E expanded the program to cover more retailers, both big and small. The program increased the number of participating manufacturers to provide more energy efficient lighting choices at traditional lighting channels such as Home Depot and Lowes. The program also increased the number of participating retailers in the grocery retail channel. Many of these grocery retailers are small retailer outlets that serve minority and low-income communities.

SDG&E found that some non-traditional lighting retailers have low capacity to absorb the incentivized lightings. Based on the interviews of the lighting manufacturers and other IOU program managers, the above fact might be due to these channel's sales focus on non-lighting products.

In addition, SDG&E reduced incentive award to big-box lighting retailers to be more aligned with the net-to-gross-ratio's (NTGR's) framework, which encourages the IOUs to focus more on non-

traditional lighting retail channels.

SDGE3114 SW-ResB - Advanced Consumer Lighting Narrative

SDG&E Advance Consumer Lighting Program includes: marketing education and outreach; worker education and training; and upstream and midstream incentives to: promote market awareness; influence customer's perception of energy efficient lighting; facilitate stocking of energy efficient lighting products in sales channels; and encourage the purchase of these products by lowering the purchase costs through upstream or midstream incentive channels. Additionally, the program participates in codes and standards activities to influence the development of California's Title-24, Title-20 codes and Federal's standards on lighting to ensure futures codes and standards support the Strategic goals.

The products that this program promotes are energy efficient lighting products such as specialty CFL bulbs, CFL lighting fixtures, LED bulbs and fixtures. All of the promoted products are Energy Star labeled or DLC certified.

The program successfully recruited the participation of over 20 lighting manufacturers that distribute their products through about 200 retailer partners with more 400 retail locations throughout SDG&E's service areas.

In accordance to the D.09-09-047 and the Strategic Goals, SDG&E phased out the Plug-in Lamp Exchange giveaway from about 15-20 annual events to just 5 events in 2012. SDG&E will not conduct exchange giveaway events after the end of 2012. The exchange/ giveaway events are replaced by more innovative Light Fairs as ME&O events to promote energy efficient lightings and provide the opportunities for customers to buy sample energy efficient lighting kits. The Light Fair is described in more detail below.

Two Light Fair and Lighting Field Services trials were held in 2012. The primary objectives of these trials are to increase customer awareness and improve customer perception of energy efficient lighting. Additionally, these trials seek to increase market adoption of efficient lighting which in turn encourage manufacturers to produce and encourage sales channels to stock more efficient lighting products as ongoing business practices.

- The Lighting Field Services trial was implemented by 3rd Party Contractors to support SDG&E's Residential Lighting Program at about 218 participating retailers with more than 400 outlets in SDG&E's service area by:
    1. Maintaining marketing material at participating retail stores
    2. Providing training for retail store personnel on how to sell energy efficient lighting
    3. Providing in-store education to customers about the advantages of energy efficient lighting
    4. Collecting marketing data such as product availability and pricing
    5. Collecting retailer and customer feedback on the lighting products

The Light Fair trial was coordinated by a mobile retailer that: 1) hosted Educational Energy-Saving

Light Fairs at various major employment centers; 2) demonstrated energy efficient lighting; and 3) educated customers on how to pick the correct lighting products for intended end use. The education included the distinction between lumens vs. wattage, the importance of color temperature, and reading labels for lighting facts. The Light Fair also provides customers the opportunity to purchase incentivized energy efficient lighting kits to try in their home.

Although the program met the 2012 projected energy savings goals, there were some barriers to the program that were discovered. The high net-to-gross-ratio (NTGR) sales channels have low capacity to absorb the incentivized lightings. Based on the interviews of the lighting manufacturers and other IOU program managers, the above fact might be due to these channel's sales focus on non-lighting products.

SDGE3115 SW-ResG - Business/Consumer Electronics/Plug Load Narrative

The Business and Consumer Electronics Program (BCEP) was a new addition to the 2010-2012 residential energy efficiency portfolio in 2011. The BCEP provides midstream incentives to retailers to encourage increased stocking, promotion, and sales of high-efficient electronic products including computers, computer monitors, televisions, and additional business and consumer electronics as they become available to the market. The program provides incentives to the market actor best positioned to influence purchasing, stocking, and specification decisions and provides field support services to update marketing materials in retail stores and support education to the retailer sales force.

In 2012 the statewide Business and Consumer Electronics program (BCE) succeeded in driving reductions in residential and business plug load energy use by continuing to offer incentives for the most efficient ENERGY STAR® qualified televisions. In an effort to increase the availability of more efficient televisions, the BCE program team, once again, increased specifications for televisions from the original 2011 specification. This ensured the programs continual push for advancement in the stocking, availability and promotion of the most energy efficient televisions in the market. In 2012, the combined partnership between the California IOU and other utilities known as the BCE Partners (consisting of SCE, PG&E, SMUD, NEEA and other utilities) also explored new products, technologies and channel partners to include in the BCE program for future program years. The BCE program also worked with ENERGY STAR® to help in the development of more advanced ENERGY STAR® specifications and provided input on EPA's Vision and Guiding Principles document for electronics.

In 2011, the Energy Division (ED) gave conditional work paper approval on the televisions 5 and 5+20%. An impact evaluation was to be conducted to determine whether or not the IOUs would receive the entire savings being claimed in the work papers or if the IOUs would only be able to claim a partial amount. The impact evaluation was not released until 2013 which was much later than originally anticipated. This made it difficult in 2012 to communicate to retailers if the program would continue in 2013. The uncertainty around the impact evaluation has impacted the communication amongst the IOUs and participating retailers. It is essential that participating retailers are aware of what the new specification levels are that would need to be met prior to making buying decisions. It is the responsibility of the IOUs to notify the retailers as soon as possible what

the specification levels are for the products that are agreed upon for the following year so that retailers may use their influence to drive manufactures to develop higher efficient electronics.

Based on the work papers submitted to the ED, the BCE savings goals for 2010-2012 were achieved, but due to the impact evaluation that the Energy Division has requested the analysis on the work papers and program design the actual savings for 2011-2012 is still yet to be determined.

The program met and exceeded the savings goals objectives.

SDGE3116 Local01 - Local Whole House Performance Narrative

SDG&E's Whole House Performance Program ("WHPP") is a new addition to the 2010-2012 residential energy efficiency portfolio. The program proposes to deliver comprehensive energy efficiency improvement packages tailored for both the home resale and home modeling markets. The WHPP solicits, screens, and trains qualified residential repair and renovation contractors to assemble capable contracting teams and perform whole-house diagnostics, propose a comprehensive energy efficiency improvement package, and complete the improvements. The program also includes marketing activities to help educate customers on WHPP program services as well as providing additional customer leads to trained and experienced contractors. Incentives and available financing options will be provided to help offset the initial homeowners cost for the energy efficiency home performance improvements. Contractors will receive an incentive for formal home diagnostics, post retrofit quality assurance testing and reporting data on all jobs. Furthermore, the program will provide consistent standards and professional identity in association with the national Home Performance with ENERGY STAR® program.

The WHPP services for participating contractors includes: orientation, training in both technical and business/marketing/sales topics, field mentoring and support, specialty teambuilding, website materials, email newsletters, an online peer group Q&A forum, and a broad range of alliance-building, education and marketing services.

There were several program achievements in 2012:

- Held participation workshops throughout SDG&E service territory to recruit additional contractors into the program.
- Implemented a variety of marketing strategies (community events, door-to-door outreach, and web banners) to promote the program.
- Conducted a targeted marketing approach and hosted community events to gain lead generation.
- Expanded contractor training offerings to include webinars and workshops on topics of energy modeling and marketing.
- Implemented a contractor mentoring component.
- Partnered with AARA funded and Local Government Partnership funded programs.
- Implemented a participating HER rater path

High cost of residential home retrofit projects continues to be a barrier and while there have been

some pocket successes; a lack of access to low cost, long term financing continues to be an issue for many customers. The continued absence of Property Assessed Clean Energy ("PACE") financing has created a barrier if not an impediment to meeting program goals as access to PACE financing was assumed when program targets were contemplated. Energy Pro modeling software and a lack of marketplace alternatives continues to be a challenge for many contractors both from a technical and marketing standpoint.

The program consolidated the Prescriptive Whole House Retrofit Program (SDGE 3156) budget with Local Whole House Performance Program (SDGE 3116) via the PIP Addendum process.

The program met its 2012 kW goal and did not meet its kWh and therm goals due to low participation in the program

SDGE3117 Local03 - Local Non-Residential Bid Narrative

The SDG&E Local Non-Residential Program – also known as Energy Savings BID (ESB) – is a customized incentive program designed to fit the unique needs of non-residential customers.

The program serves all non-residential market segments within the SDG&E service territory. Non-residential market segments include: Wholesale/Retail/Office, Government/Utilities, Hospitality/Services, Manufacturing/Processing Industries, Institutional, and Agriculture/Construction. Each segment has distinct energy use patterns, differences in equipment and facility design, and various management structures and decision-making processes. Because each market segment is unique, ESB favors a flexible, customized, and customer-focused approach. This approach will ensure the ESB's adaptability to the specialized needs of each market segment.

The Program was able to continue to build on its implementation of the Custom Measure Process, and able to clearly communicate these processes and procedures to customers and project sponsors. The relationship between the Program and key internal and external stakeholders was strengthened in 2012, particularly with Trade Professionals. Trade Professionals were invited to participate in several Program Advisory Group meetings, and at least two informal meetings with the objective of receiving feedback and input to the impending changes to the Calculated Incentive Program at SDG&E. Due to similarities between BID and the Calculated Program the BID program was discontinued in 2013-14 and absorbed by the Calculated Program.

ESB met its objectives in 2012.

SDGE3118 SW-NCNR - NRNC Savings By Design Narrative

Savings By Design (SBD) is a program in the nonresidential commercial new construction market sector; available statewide with common rules and criteria; a continuation of the successful statewide Savings By Design program existing since 1999. The program promotes integrated design and emphasizes early design involvement by offering building owners and their design teams a wide range of services including education, design assistance, and owner incentives, as well as design

team incentives.

The Savings By Design program continues to build on its thirteen year history of offering nonresidential new construction customers the benefits of energy-efficient building design and construction practices. In 2012, the program achieved a record breaking year of annual customer participation. The program was able to assist more customers and improve the energy efficiency of more projects in 2012 than any program year previous. Savings By Design program interest and participation is very strong within the SDG&E service territory and continues to grow.
Earlier on within the beginning of 2012, the economic downturn was a temporary barrier for customers pursuing program participation. Although later on within the cycle the sheer number of participants provided proof that the program overcame that intermediate economic downturn.

The program met its 2012 savings goals.

SDGE3119 SW-ResC - Multifamily Narrative

The Multifamily Energy Efficiency Rebate (MFEER) Program offers prescribed rebates for energy efficient products to motivate the multifamily property owners and managers to install energy efficient products in both common and dwelling areas of multifamily complexes and common areas of mobile home parks and condominiums. An additional objective is to heighten the energy efficiency awareness of property owners/managers and tenants.

The MFEER must address the ongoing concern with "split incentives", where the residents are not the owners of the property, so they lack incentive to improve their energy usage. Similarly, the property owners do not live on-site and pay higher utility expenses due to inefficient appliances, thus lack any incentive to upgrade. MFEER was designed to drive this customer segment toward participation by offering property owners a variety of energy efficiency measures and services.

SDG&E was able to implement a contractor's budget cap which was a direct result of best practices recommended in the ECO Northwest Study. The contractors were limited to $12,500 per quarter which allowed the Program Manager to track the level of spending within the program. This allowed for the program to remain open and not close prematurely due to budget issues.

There is an ongoing concern with the "split incentives" where the residents are not the owners of the property, so they lack incentive to improve their energy usage. Any measure or appliance that is installed in the tenant dwelling area will provide benefits to the tenant while costs may go to the owner/manager. This makes it difficult to get buy-in from the owners and/or managers to participate in the program.

The issue of affordability, up-front out-of-pocket costs also poses a significant participation barrier for the customer. With the exception of some of the larger property management firms, pay-back terms, no matter how favorable, are perceived as an unacceptable risk by the average customer.

In 2012, the MFEER program coordinated efforts with ESAP team to leverage programs and streamline the process to ensure that income qualified customers are being served. Brainstorming

sessions yielded the idea that the manual process be replaced through an automated process where the third party vendor (currently working with ESAP) would verify eligibility.

The Multifamily program was unable to meet the savings goals, in part, due to the limited type of contractors who participated in the program. The MFEER program primarily had lighting contractors in the program. MFEER implemented a comprehensive requirement where gas measures had to be installed with electric measures when appropriate, in hopes this would penetrate both kW, kWh and therms savings.

SDGE3120 SW-NCResB - E-Star Manufactured Homes Narrative

The ENERGY STAR® Manufactured Homes Program (ESMH) was newly implemented during the 2010 – 2012 program cycles. This program launched in June 2011 and is part of the statewide Residential New Construction (RNC) program offering. ESMH addresses new factory-built housing.

Contracting with the Systems Building Research Alliance (SBRA) has been very beneficial because it has provided industry knowledge, retailer contact information, technical expertise, and project leads.

The program advisor used this information to contact retailers by mail and phone. The method that brought most of the response from retailers were emails. The program advisor worked closely with two retailers that submitted applications to help expedite the process and receive their rebates.

In 2012, there was still a noticeable lack in participation. The retailers that were visited expressed interest and enthusiasm in the program, however, none submitted a complete rebate application. SBRA provided figures on manufactured homes sold in SDG&E territory that met ENERGY STAR requirements, yet the retailers who sold those homes did not submit anything. Reminders to participate were sent without effect. The problem of low participation has been viewed as SDG&E's biggest issue with this program, and possible solutions will need to be developed and applied.

There was some confusion regarding the HVAC requirements listed in the Program Description form, which indicated this area requires more emphasis in discussions with retailers.

Even with incentives changes and meetings held with the retailers in 2011, the program did not meet the 2012 goals because of continued lack of retailer participation.

SDGE3121 SW-ResD - Home Efficiency Rebates Narrative

The statewide HEER program offers rebates to residential end-use customers to cover incremental costs of purchasing energy efficiency appliances. Products are rebated through a mail-in application process while others provide point-of-sale (POS) immediate rebates. It is a prescriptive program where rebates are offered for a specific list of energy-efficient products. This list of rebated measures may vary by utility. Recently, measures that support savings in natural

gas and water use have been added to the electricity-saving measures. The measure list includes items that can be delivered then plugged-in such as Energy Star Qualified® Refrigerators, Energy Star Qualified® Room Air Conditioners, Water Heaters, Whole House Fans and Variable Speed Pool Pumps, furnaces, clothes washers, attic and wall insulation that may involve contractors support. Finally, the statewide HEER program is traditionally supported by various marketing initiatives that may be funded by the program or other indirect impact marketing programs such as statewide Marketing Education Outreach (MEO) program and local marketing programs.

The strategies proving to be working well are the POS instant rebates and providing in-store training for the retail sales staff to sell energy efficiency benefits to customers and providing detailed information about SDG&E's energy efficiency programs. In 2012, SDG&E had in-store POS instant rebates; mail-in rebate and online-rebate application to maximize the convenience for customers to participate in the program. SDG&E employed a 3rd party contractor to provide: in-store retail training for the sales staff; to ensure proper display of POS marketing material; to monitor the retailer's program participation and to obtain feedback for SDG&E's continuous improvement of the program.

Key operational challenge faced in 2012 was limited budgets for:

1. Keeping the rebate program running continuously throughout the entire year, and
2. Sustaining high-level of field service to help maintaining the presence of SDG&E in the retail spaces and ongoing promotion of energy efficiency products
3. Providing training for contractors on code compliance and sales of energy efficiency products and services
4. Developing strategic partnership with retailers and manufacturers for influencing product assortment selection and new product development respectively

Additionally, fundamental challenges at the programmatic frameworks levels are:

1. Customers tend to rank energy efficiency as low priority and some perceive that energy efficiency design compromises product performance and convenience.
2. National market trends are the dominant drivers influencing manufacturers and retailers' offering of appliances and electronics products. Regional utility programs face challenges in attracting manufacturer and retailer participation due to the national scope of products.
3. SDG&E's online presence has not fully developed to support growing importance in the customer's product purchasing process. The customer toggles back and forth between the traditional brick-and-mortar retailers and e-commerce sites for product research, price shopping, purchases, and post-sales support.
4. The incremental energy savings from miscellaneous electronics are too small to motivate customer's behavior changes, and too costly for IOUs' current product-base program framework.
5. The rapid product life cycle for consumer electronics of 6-12 months poses significant challenges in establishing saving baselines and work-paper development for individual measures.

6. Growing trends of networking home electronics cause energy saving for products to be highly dependent on consumer behavior or usage settings. This isolation of energy savings and consumption on a product-by-product basis becomes challenging.

The HEER exceeded its energy savings goals for 2012.

SDGE3122 SW-ResE - Home Efficiency Surveys Narrative

The Home Energy Efficiency Survey (HEES) Program offers statewide innovative initiatives to reverse the growth of plug loads and other energy consumption through behavioral solutions and, as warranted, demand side management (DSM) integration opportunities through energy surveys. The HEES Program is be used to reach out to customers in multiple languages through different delivery channels to perform a variety of energy surveys. The program will provide survey results to enable participants to understand how their energy use varies throughout the year and how their household compares with similar households. The HEES program will be available to both homeowners and renters. A multi-language approach will enhance the program's ability to reach California's diverse culture and provides efficiency recommendations based on a whole-house system.

The program exceeded the on-line survey goal 2010 through 2012. . During 2010 & 2011, the program struggled to meet the annual goal.
However, in 2012 the HEES program partnered with the government agencies to reach out to unincorporated and hard-to-reach areas and exceeded the goal with over 6,900 completed mail-in surveys. The combined total far exceeded the three year target.

The new Universal Audit Tool (on-line survey) was launched in May 2012 and the On-Line Buyer's Guide was introduced in December 2012.

The HEES program partnered with the California Center of Sustainable Energy to host a webinar for solar vendors to learn how to navigate through the new Home Energy Advisor, SDG&E's version of the on-line (UAT). Over 100 solar vendors participated in the webinar and were able to share the information with SDG&E residential customers participating in the CSI program.

In order to promote the UAT tool to our low-income customers, a hands-on presentation was given to members of an environmental group in July 2012. Members of the group can access the on-line survey on their portable devices during their home visits to SDG&E customers to educate them on their energy use and how to better manage their consumption to lower their consumption and save money on their bill.

The Universal Audit Tool (UAT) must be accessed through the My Account portal. Some customers may have reservations or do not feel comfortable creating a user password and log-in. My Account is in English only which may further dissuade people from using the tool if they are non-English speaking customers.

Delays in selecting a UAT vendor until the end of 2011 and the aggressive target to launch the tool in second quarter 2012 have taken their toll. A number of defects were uncovered during the User

Acceptance Testing that further delayed the launch until Q2 2012 versus the original target of Q1 2012.

The Home Energy Advisor Tool was not designed to track completion of all the modules contained within the survey tool. SDG&E is concluding work to resolve all data defects. SDG&E anticipates completion by March 2013. Subsequently, development of the Data Warehouse can begin and SDG&E is in the process of committing IT resources for this project and anticipate completion in Q3 2013.

The on-line survey tool was replaced in May 2012 with the Home Energy Advisor Survey, SDG&E's version of the UAT.

HEES met the following program objectives in 2012:

- UAT launched in May 2012
- On-Line Buyer's Guide (OBG) launched in December 2012
- IOUs met on a consistent basis to ensure consistency in the UAT and OBG tools
- Worked with Community Outreach Agencies to reach low-income customers
- Exceeded three year target goals for on-line and mail-in surveys

SDGE3123 L-InstP01 - CA Depart of Corrections Partnership Narrative

The CDCR/IOU partnership is a customized statewide energy efficiency partnership program that accomplishes immediate, long-term peak energy demand savings and establishes a permanent framework for sustainable, long-term comprehensive energy management programs at CDCR institutions served by California's four large IOU's.

This program capitalizes on the vast opportunities for efficiency improvements and utilizes the resources and expertise of CDCR and IOU staff to ensure a successful and cost-effective program that meets all objectives of the California Public Utilities Commission (CPUC or Commission). The program also leverages the existing contractual relationship between CDCR and Energy Service Companies (ESCOs) to develop and implement energy projects in CDCR facilities.

Regular Management Team meeting (every 3 weeks) and Executive Team meetings (quarterly) with program administrator have been instrumental in identifying and managing projects, and to proactively address any challenges the program may have faced. The Statewide Partnership Team successfully coordinated approval of On Bill Financing Loan Agreement for use with CDCR.

The CDCR Partnership faces an ongoing challenge of meeting goals with one state prison facility in SDG&E territory. Although no projects were completed in 2012, projects were identified and began development for future years.

SDG&E's CDCR partnership program became non-resource in the current program cycle. The program's savings goals and incentive funding are in commercial core programs.

The goals are tracked using database software and monthly reports prepared for the program supervisor and manager. In 2012, projects were identified and developed for implementation in 2013-14.

SDGE3124 L-InstP02 - CA Community College Partnership Narrative

The California Community Colleges/Investor Owned Utility Energy Efficiency Partnership is a unique, statewide program to achieve immediate and long-term energy savings and peak demand reduction within California's higher education system. The combined funding of nearly $15M for the 2010-2012 program cycle will continue the progress established during the 2006-2008 Energy Efficiency Program cycle and 2009 Bridge Period to create a permanent framework for sustainable, comprehensive energy management at Community College campuses served by California's four Investor Owned Utilities (IOUs).

In the fourth quarter of 2012, the CCC/IOU Partnership continued to move forward with outreach and marketing, project identification, and project implementation activities so as build on the momentum gained during 2006-2008 and the 2009 Bridge period. Campuses were encouraged to complete projects originally forecasted for 2012 so as to maximize the number of projects completed in the three year 2010-2012 program cycle. Remaining active projects will continue to progress and complete in the next 2013-2014 program cycle.

The program has a hierarchical management structure to ensure successful implementation. The Management Team meets monthly to conduct business at the management level, whereas the Executive Team meets quarterly to discuss overall program status and policy issues. The Partnership also has an Outreach Team that focuses its efforts in several areas: (1) Developing a comprehensive list of technologies, project types, and offerings to be used by team members during campus visits to help generate project ideas; (2) Campus meetings with Facilities and O&M staff to review project opportunities and managing follow-on project development efforts; (3) Evaluation of new project technologies for suitability in the Community College market, and: (4) Planning and participation in CCC conferences.

The Management Team continued working with a CCC Board of Governor Member to build greater recognition of the program's achievements both in and out of the community college system. Such initiatives included new efforts in establishing benchmarking, partnerships with NGOs, and the development of student internships. Another exemplary outcome was the Board of Governor's Energy and Sustainability Award Program, an annual program that awards excellence in three categories: District leadership, Faculty & Student Initiatives, and Facilities & Operations projects. The award program will continue in 2013 and feature the opportunity to certify success in sustainability planning.

The Management Team continued to work to develop a streamlined MBCx process that was more likely to be successfully implemented in the community college environment. Program managers and administrators helped campuses develop and submit applications for the IOU's on bill financing program and worked closely with the ETAP program to identify districts that could leverage

incentives from both Programs; this allowed development of economically feasible projects that previously were cost prohibitive for many districts.

Campus Forums were hosted quarterly at campuses across the State, serving as a venue for districts to share successes and strategies for overcoming obstacles. Additionally, in preparation for the new 2013-2014 program cycle, the Management Team used the 4th quarter of 2012 to plan MBCx/RCx training and created a Call for Projects form in anticipation of potential Prop 39 funding for campus projects.

The most common and inhibitive barrier is lack of funding at the campuses to develop and implement projects. Even projects with short payback periods or those financed though on bill financing (OBF) still need upfront funding that is difficult to allocate within state-funded institutions. Additionally, community colleges tend to lack resources within their facilities and maintenance departments that are devoted full-time to energy management.

Overall, the CCC/IOU Partnership made progress towards completing its goals for the 2010-2012 program cycle however, active projects that were originally forecasted for 2012 that did not complete by year-end will proceed with implementation and move to the 2013-2014 program cycle.

SDGE3125 L-InstP03 - UC/CSU/IOU Partnership Narrative

The University of California/California State University/Investor Owned Utility Energy Efficiency Partnership is a unique, statewide program designed to achieve immediate and long-term energy savings and peak demand reduction within California's higher education system. The incentive funding for the
2010-12 program cycle will continue the permanent framework established in previous program cycles for sustainable, comprehensive energy management at campuses served by California's four Investor Owned Utilities.

The program has a hierarchical management structure to ensure successful implementation. The Management Team meets every three weeks to conduct business at the management level, whereas the Executive Team meets quarterly to discuss overall program status and policy issues. The Partnership also has a Training and Education Team that organizes various energy efficiency trainings targeted to university campuses. Because University of California Office of the President and California State University Chancellor's Office each has members on both the Management and Executive Team, the campuses are well supported in their efforts to implement energy efficiency projects. This top-down communication approach has been successful in marketing program opportunities.

Members of the management team also meet on a regular basis to document implementation progress, identify and resolve issues, and drive project completion. The Program Administrator actively tracks project savings and schedule data in online tracking tool, and creates regular reports to show overall status of program or forecasts relative to goals.

Other noteworthy successes are as follows:

- **Administrative**
  - Continued planning for the 2013-14 Partnership Cycle, with a focus on 2012 goal achievement.
  - Began preliminary talks about suggested modifications for potential 2013-12 Bridge/Extension.
  - Worked with campuses to enroll projects in the IOU's On Bill Financing programs.
  - Worked with each IOU's Savings By Design representatives to further integrate the new construction element into existing program management processes.

- **Projects**
  - Continued work to integrate new construction projects into Partnership programs by identifying eligible projects and working with individual campus architects and designers to help facilitate the application and approval processes
  - Continued to implement an enhanced project tracking and scheduling approach giving campuses more direct control and responsibility for project tracking.

- **Training, Education and Outreach**
  - Continue to maintain "Stakeholder Communications" page to public website with up-to-date program documentation ("Program Information Package") and announcements area.
  - Worked with Campus auxiliaries (housing, dining, etc.) and Medical Centers to educate on Partnership processes and incentive opportunities.
  - Offered free food service facility audits to all campuses through a collaboration between T&E Program and IOU Energy Centers.
  - Held LEED Existing Building Operations & Maintenance courses at UC campuses.
  - Held C.E.M certification courses for campus faculty and staff members
  - Continued planning for an educational seminar on the benefits of energy efficiency investments and demonstration of successful technologies for campus chancellors and other executive decision makers.
  - Held workshops on Deep Energy Efficiency Strategies at UC Irvine and UC Davis.
  - UC/CSU Joint Energy Managers meeting held as part of the CA Higher Education Sustainability Conference.

Particular scheduling challenges were met as 2012 marked the end of the three year 2010-2012 program cycle. Campuses were strongly encouraged to adhere to originally forecasted 2012 completion dates and finish project implementation early enough in the fall of 2012 to allow IOUs an adequate amount of time to verify savings in order to consider a project complete and paid in 2012. Projects selected for Energy Division review were often delayed further as implementation schedules and IOU verification were put on holding pending release of ED review. Additionally, as noted in past reports, a common and inhibitive barrier is lack of funding at the campuses to develop and implement projects. Even projects with short payback periods or those financed though OBF still need upfront funding that is difficult to allocate within state-funded institutions.

With 2012 marking the end of the three year program cycle, the UC/CSU/IOU Management Team focused efforts on encouraging campuses to complete projects in time for 2012 accrual. Campuses were notified on a monthly basis of projects that were at risk of not completing in time for year-end

accrual, therefore increasing awareness of project schedules in an effort to mitigate additional delays. Additionally, campuses were encouraged to complete projects featuring sun-setting measures that will no longer be eligible for incentives in the 2013-2014 program cycle.

Overall, the Statewide UC/CSU/IOU Partnership program exceeded all of its energy savings goals for the 2010-2012 program cycle. SDG&E in particular fell just below its mark due to scheduling delays and various other reasons.

SDGE3126 L-InstP04 - State of California /IOU Partnership Narrative

State of California/Investor-Owned Utilities (SOC) program is collaborating to assist the state's 36 agencies to reduce the amount of energy they purchase by 20 percent by 2015, as required by the governor's Executive Order S-20-04 (i.e. Green Building Initiative (GBI)). Like all Executive Orders, the GBI is an unfunded mandate that requires State agencies to support the governor's environmental agenda.

The California Department of General Services (DGS) has been a key partner, acting as the main point of contact between the Investor Owned Utilities (IOUs) and many state agencies. They have hired an Energy Service Company (ESCO) to identify and manage a variety of projects for most of the state agencies. This success has been the direct result of the availability of ARRA funding and the State's implementation of its $25 million energy revolving loan fund. DGS also hired an ESCO to identify and manage projects for most of the state agencies.

The SOC program has continued slowly for a variety of reasons, including: the State's required specific liability language on our contracts and agreements; ARRA funding although needed for the program, required additional work by the State to encumber the funds; ESCO's unfamiliarity with SOC project requirements; and late requirement from the CEC regarding federal fair wage act documentation.

In addition the State is looking into utilizing On Bill Financing available from the IOUs but is requiring an appropriations clause that is being dealt with between Department of Finance and IOU legal teams. This has led to a revisit of the indemnification language used in the State agreements.

Although SDG&E's SOC partnership program is non-resource, we have specific kW, kWh, therm, and incentive funding goals. All of our incentive dollars are in the commercial core programs.

We track our goals using database software and prepare monthly reports for our program supervisor and manager.

SDGE3127 L-InstP05 - University of San Diego Partnership Narrative

The Energy Efficiency & Conservation Outreach Program is offered by San Diego Gas & Electric Company (SDG&E) and the University of San Diego (USD). The program is designed to create a more sustainable campus with a smaller environmental footprint by reducing greenhouse gas

emissions through measureable energy and demand savings. Coupled with facility retrofits, the outreach and education of students, staff, and alumni emphasizes behavior modification. In addition, the program is intended to increase campus awareness about energy efficiency and conservation inside the classroom and in the larger community.

Partnership activities that were successful in 2012 include:

- The University of San Diego held 34 events in 2012 that addressed sustainability, energy efficiency or climate change that reached more than 3500 people. Additionally, training and education workshops were conducted for all students involved in orientation and all resident assistants on campus to help build a mindful and educated community when it comes to resource conservation. The Partnership also presented at the Association for the Advancement of Sustainability in Higher Education (AASHE) and highlighted the impact and benefits of the SDG&E and USD partnership.
- The University of San Diego was also involved directly with the design and creation of the Climate Collaborative, a regional consortium of Governments, businesses and academia. The Collaborative highlights the work being done in San Diego to meet state climate change policy while sharing best practices and resources across the industry.
- The university identified energy savings projects to be implemented in early 2013. An extensive lighting retrofit audit was conducted and is slated to be online in the initial months of 2013.
- A new website to disseminate information was created that has had more than 5,000 visitors who learned about the impact of energy efficiency and the impact of climate change according to Google Analytics. Additionally, USD created a new monthly newsletter to keep the campus up-to-date on sustainability projects.
- Finally, nationally recognized environmentalist, Dr. Mitchell Thomashow, was brought to campus for a week to consult for the university on sustainability and conservation initiatives. Dr. Thomashow also presented at a joint Higher Education and Local Government Partnerships meeting on the Nine Elements of a Sustainable Campus.

The only implementation issue the partnership encountered in 2012 was the delay of the Emerging Technologies Showerminder installation. Due to unforeseen manufacturing issues the program was delayed until Q2 of 2013.

As a new non-resource program, a couple of benchmarks have been instituted to track accomplishments. First is savings of kWh and therms for the university based on efficiency measures installed in June 2010. A total of over 9 million kWhrs and over 129,000 Therms in energy savings have been tracked. An additional benchmark was established to track the number of people reached throughout the course of the program. From January 12 – December 12, the program was responsible for training several energy focused employees (HVAC techs and the Campus Energy Manager) and more than 3,500 community members who attended more than 30 events that were organized by the Office of Sustainability.

SDGE3128 L-InstP06 - San Diego County Water Authority Partnership Narrative

The San Diego County Water Authority Partnership has two main components: a combined rebate from SDG&E and SDCWA to the customer for High-Efficiency Clothes Washers (HEWs) and Energy Efficiency Surveys for water agencies. The HEW component of the SoCal WaterSmart Program offers a rebate to encourage consumers to purchase high-efficiency clothes washers. Water customers of participating water agencies are eligible. Rebates are provided to single-family and multifamily residential customers. The Energy Efficiency Surveys for water agencies component of the program provides additional opportunities to improve energy efficiencies and reduce energy costs for participating SDCWA member agencies. The program is intended to offer and perform surveys that will enable the Water Authority and its member agencies to identify energy efficiency opportunities, conservation measures, solar opportunities, and where feasible, opportunities for demand reduction. In addition, in order to achieve the efficiencies identified in the surveys, the program will provide implementation assistance, including the identification of and application for various incentives, rebates, or other financial assistance available for retrofit projects.

In 2012, the program was very successful. The success can be traced to the following: 1) a continuing partnership with other SDG&E programs to disseminate information to customers; 2) the collaborative promotion of the program through more than 50 retail stores throughout the county and numerous homebuilders; 3) the enlistment of SDG&E marketing/account execs to assist with outreach/distribution; 4) the employment of public relations efforts; and 5) the participation in water agency outreach/education community events.

The purpose of the Energy Efficiency Survey component was to assess the energy consuming processes at the selected facilities, provide each agency with energy use and cost metrics, support special energy related issues and specific tasks and identify potential Energy Conservation Opportunities (ECOs). The program was very successful and has received very positive feedback. Some of the overall program highlights accomplished:

- Provided energy auditing and energy engineering assistance to eight agencies with over 100 facilities,
- Reviewed and confirmed energy efficiency practices,
- Provided and/or built upon the understanding of water/energy connection,
- Conducted training on available information (SDG&E Energy) and effective interpretation of data to improve operations,
- Identified over 150 operational, maintenance replacement opportunities to improve equipment efficiency, plant performance, and enhance reliability,
- Identified incentives and rebate programs for inclusion into the various energy conservation activities,
- Identified demand management opportunities (>2.5 MW) and metrics and prepared software tools to assist in decision making,
- Consumption savings (0-5 % for booster stations, 0-8% for treatment plants, and 0-10% for structures),
- Evaluated the appropriate utility rate schedule for operation of assets (21 rate schedule modifications noted),

- Evaluated a wastewater treatment plant expansion currently under design and helped incorporate ECOs into the final design,
- Conducted workshops to help prepare for future water/energy impacts on operations and budgets,
- Evaluated water distribution system optimization opportunities (operation of various booster stations supporting the same operating zone), and
- Provided framework for Strategic Energy Mission Statements and Master Plans.

The HEW component of the SoCal WaterSmart Program offered a rebate to encourage consumers to purchase high-efficiency clothes washers. Water agency customers of participating water agencies were eligible. Rebates were provided to single-family and multifamily residential customers who purchased HEWs on December 31, 2010, or before. This component of the partnership terminated on September 1, 2011. SDG&E continues to offer rebates through its clothes washer program.

An engineering firm was selected as Contractor for Water Agency Energy Support Activities August 2011. SDG&E provided informational workshops to SDCWA Agencies on various occasions during June- September 2011.

The Energy Efficiency Surveys for water agencies component of the program provides additional opportunities to improve energy efficiencies and reduce energy costs for participating water agencies. The program is intended to offer and perform surveys that will enable the Water Authority and its member agencies to identify energy efficiency opportunities, conservation measures, solar opportunities, and where feasible, opportunities for demand reduction. In addition, in order to achieve the efficiencies identified in the surveys, the program provides implementation assistance, including the identification of an application for various incentives, rebates, or other financial assistance available for retrofit projects.

Program objectives were achieved and audit survey results were identified and reports provided to the project administrator, the account executive, the end use customer (water member agencies), and the SDG&E policy group. No cost recommendations were implemented and follow-up meetings held to determine next steps in the EE process. Survey result reports will be utilized to assist in determining IDSM opportunities.

SDGE3129 LGovP01 - City of Chula Vista Partnership Narrative

SDG&E and the City of Chula Vista's Local Government Partnership (SDG&E/Chula Vista Partnership) aims to enable Chula Vista, its residents, businesses, and other South Bay cities to implement energy efficiency and conservation programs by overcoming existing barriers. South Bay cities include Chula Vista, Coronado, National City, Imperial Beach and unincorporated areas of San Diego County. The SDG&E/Chula Vista Partnership also aims to increase public awareness about energy efficiency and conservation through non-traditional education and outreach outlets available to local governments. The Partnership has the following main components:

- *Municipal Facilities Efficiency Improvements* (Non-Resource Program) – Program to identify and implement energy efficiency improvements at municipal buildings and facilities.

- *EmPower Chula Vista Outreach Program* (Non-Resource Program) – Community-based campaign to identify energy saving opportunities in local businesses and residences (through onsite assessments), promote participation in SDG&E energy efficiency rebate programs, and facilitate direct installation/maintenance of efficient lighting, HVAC, and water savings kits (Therm Kits) in coordination with SDG&E.
- *Sustainable Communities Program* (Non-Resource Program) – Program promotes progressive energy-saving building and land use initiatives through local municipal code revisions, multi-departmental policy changes, permitting process streamlining, and employee and public education.
- *Energy Efficient Economic Development Initiative* (Non-Resource Program) – Program aims to evaluate, demonstrate, and provide technical assistance to foster design and construction of high-efficiency and zero-net-energy economic development and redevelopment projects.

The SDG&E/Chula Vista Partnership continued to meet and exceed its designated objectives in creating new energy efficiency opportunities in the community. Below are specific highlights from the various components:

- *Municipal Facilities Efficiency Improvements* (Non-Resource Program) – In 2012, the City completed energy efficiency audits at all major facilities (40+) and upgrade projects at 1 facility. Chula Vista also developed its first "Environmental Resource Report", which analyzed four years of municipal utility data (from over 600 electricity and natural gas accounts) and has allowed the City to further identify energy management opportunities. Finally, the City created a draft "Revolving Utility Conservation Fund" policy that would provide ongoing financing for municipal energy upgrades, which will be presented to the City Council for consideration.
- *EmPower Chula Vista Outreach Program* (Non-Resource Program) – City staff completed approximately 760 business energy evaluations (through the Free Resource & Energy Business Evaluation or FREBE) to promote energy and water saving opportunities and SDG&E incentive programs. In addition to educating business owners/managers, the evaluations generated over 260 referrals to the SDG&E Small Business Direct Install program in 2012. Through its CLEAN Business Program's year-long "Challenge," the City further encouraged participating businesses to adopt more sustainable practices. Finally, the City, in partnership with SDG&E and the California Center for Sustainable Energy, developed two energy upgrade demonstration homes to help educate community members about Energy Upgrade California.
- *Sustainable Communities Outreach Program* (Non-Resource Program) – In 2012, the Program enabled the City to perform over 120 secondary plan checks and audits to ensure compliance with the City's energy efficiency "reach" code (15-20% above Title-24) and green building standard. Since their inception, 1,267 new/remodeled dwelling units have complied with the higher standards. Over 15 in-house staff trainings on energy efficiency and green building standards were also conducted for Building Inspectors, Development Services Technicians, and Plans Examiners in 2012. Through its Climate Adaptation Plan, the City successfully adopted a new Cool Roof ordinance and a Shade Tree policy to address urban heat island effects and to reduce energy demand.
- *Energy Efficient Economic Development Initiative* (Non-Resource Program) – Through the Program, the City was able to initiate a Green Business Recruitment Study to identify local

resources that would be helpful in attracting clean energy and related industries. Chula Vista also worked to create "green" economic development opportunities in 2012 through various business outreach initiatives and participation on CleanTECH San Diego's Board of Directors.

Chula Vista continually reassesses its implementation priorities for its Local Government Partnership program to take advantage of new opportunities (such as supplementary grant funding and emerging technologies) or to address new challenges (such as staff layoffs and attrition). In addition, the City constantly works to create new outreach methods and marketing approaches to broaden community participation in Partnership programs and to ensure reaching its goals.

In 2012, two Local Government Partnership components were officially launched to leverage new energy efficiency education and outreach opportunities in Chula Vista. At both library branches, new "Energy Lounges" were created to provide patrons with energy-related books, resources, and hands-on tools, which have since been circulated over 1,400 times in the past 12 months. New LED digital signs on the libraries' exteriors also help to communicate important energy conservation and program messaging. At Chula Vista's recreation centers, new education activities and outreach materials have been developed to engage youth in energy efficiency discussions and to promote energy-saving behavioral choices throughout the community.

For non-resource programs, each Local Government Partnership component used various metrics to gauge program performance. For municipal facilities improvements, performance was assessed by tracking the kWh, kW and therm savings from lighting, HVAC, and boiler retrofits.

Performance metrics for the EmPower Chula Vista Outreach Program include the number of businesses/residents receiving energy evaluations, the number of SDG&E referrals generated, and the percentage of participants implementing an energy-saving improvement (based on a post evaluation survey). The Sustainable Communities Program tracks its performance by documenting the number of new/retrofitted buildings complying with the City's energy efficiency "reach" code, number of permit applicants assisted with energy efficiency questions, and the number of completed energy-related trainings for staff. Finally, the Energy Efficient Economic Development Initiative tracks the completion of studies and business recruitment efforts to promote energy efficient new development.

SDGE3130 LGovP02 - City of San Diego Partnership Narrative

Overview

The Local Government Partnership (LGP) is a catalyst for increasing energy efficiency in City operations and in the community. While this is a non-resource program, savings resulting from the City's LGP activities are captured San Diego Gas & Electric's (SDG&E) core programs.

I. Energy Efficiency Improvements in Municipal Facilities and Operations

This is a five-part program: 1) Energy efficiency improvements in municipal facilities; 2) Expansion of broad spectrum street lighting; 3) Specifications for consistent use of best-in-class technology; 4) Energy audits and implementation of recommended actions; and 5) Energy training and certification

program for City staff.

- Citywide lighting retrofits of recreation centers. SDG&E Rebates have been received.
- Fire Communications Center – Project replaced old Heating, Ventilation and Air Conditioning (HVAC) with newer more energy efficient equipment. This included installation of 14 fan coils, two air handler units, one computer room air conditioner, and new digital controls replacing pneumatic controls and integrating into the existing direct digital control system.
- Carmel Valley Library – HVAC replacements: One 20-ton packaged unit and one 10-ton packaged unit were replaced.
- Streetlight Working Group – Successful conclusion and all objectives were accomplished. The objective of this collaborative effort was to obtain a broad perspective from the local government community as it related to street lights and the most current technology and best application for our City. Post Top Working Group – Successful post top pilot installation in November 2012, next step is adaptive control study. The objective of this collaborative effort was to obtain a local perspective from stakeholders regarding their perspective on Broad Spectrum Lighting verses High Pressure Sodium and their desire to change the pedestrian lighting in the downtown Gaslamp area.
- Broad Spectrum Street Light Project for the $16 million Street Light design build contract was issued, and installation of all 35,311 lights will be completed by April 2013..
- Public Utilities Department's (PUD) Energy and Climate Protection Team conducted energy and climate protection evaluations of four water treatment facilities in the San Diego area.
- Contracts for 30 facility energy audits and 14 facilities benchmarking were completed in 2012.
- Balboa Park Mingei museum project and Reuben H. Fleet projects were completed.

II. Zero Net Milestones through Codes and Standards

The City's General Plan, adopted in 2008, adheres to the California Public Utilities Commission (CPUC) Strategic Energy Plan to achieve Zero Net residential construction by 2020 and commercial construction by 2030. An audit of City regulations identifies various aspects of code implementation that may influence energy use work cohesively and without unintended consequences.

- Starting in July 2012, Development Services Department (DSD) started implementing the new CalGreen regulations that apply to additions and tenant improvements in non-residential projects.
- DSD staff has been working the US Green Building Council-San Diego Chapter in providing data and information about the current incentive program. A report identifying the effectiveness of the current program and ways to measure and improve any future incentive program was completed. Staff will work with the executive director on implementing recommendations and find the best ways to capture key information once the new incentive program is implemented.

III. Investment in a Green City

The DSD – Planning Division provides staff support to the City's community planning groups and maintains contact with a broad range of stakeholders..

- General Plan Housing Element –The draft General Plan Housing Element was reviewed for the purpose of developing energy efficiency and conservation language related to housing. As a result, additional discussion and policy language was added to Chapter 6 of the Housing Element. A final draft of the element was released in early November with adoption anticipated in March 2013.
- Community Plans – Using the framework provided by the General Plan, the City is now focusing on updating its community plans. Staff is currently working with communities to update ten community plans comprehensively, while also pursuing significant amendments and focused grant-funded studies in others. All long-range planning work currently underway includes efforts to further the General Plan's sustainability policies.
- Climate Mitigation and Adaptation Plan (CMAP) – The CMAP is a companion document to the General Plan and was prepared in accordance with General Plan Policy CE-A.13. The first draft of the CMAP was released towards the end of 2012 for public comment.

IV. Community Education and Outreach

As highlighted by the CPUC, California needs the assistance of all community sectors to deliver a large portion of Greenhouse Gas (GHG) savings necessary to reach the goals of AB 32, the Global Warming Solutions Act of 2006. A three-part program was designed to reduce greenhouse gas emissions through energy efficiency and conservation, with specific educational outreach information designed and delivered to diverse target audiences.

- Presentations and Events in 2012
  - Total Presentations 70
    - Public total 37
    - Green Students/Schools total 33
  - Total Community Events 24
    - 12th Annual Green Students Youth Forum
    - CFL Bulb Recycling and Bulb Exchanges

- Computer Based Training for City Employees – A three-part web-based training for employees on energy efficiency/conservation, water conservation, and paper reduction has been designed with rollout slated to begin in March 2013.

- Green Business Network
  - Staff began development of a Green Business Network utilizing models piloted by other local jurisdictions. A full-fledged program is slated to roll out in 2013

V. Balboa Park Energy Efficiency Program

Most of the institutions in Balboa Park lease their buildings from the City of San Diego, and many have antiquated lighting and HVAC systems.

- The Mingei project and Reuben H. Fleet were completed, and included SEMMS, HVAC and lighting upgrades. Program success was enhanced by working with another partnership member, Balboa Park Cultural Partnership, to perform project management and construction management oversight and ensure program guidelines were followed for procurement and

documentation. Implementation barriers were that American made products for this equipment were harder to procure as part of the construction funding grant requirements.

VI. Smart Energy Management Monitoring System

Smart Energy Management and Monitoring System (SEMMS) *formerly Energy Efficiency Marketing for the Clean Generation Program,* will control energy consumption at municipal buildings.

- The SEMMS plan has been expanded for additional City facilities. The detailed design has been initiated for technical specifications including necessary schematic drawings (Bridging Documents) for the core SEMMS system. SC Engineers provided the design for SEMMS for Balboa Park, CAB central plant, and Ridgehaven facility. The City is pursuing On-Bill Financing (OBF) for the CAB Central Plant portion of the SEMMS. The planning is completed. Design has been initiated with SC Engineers. Implementation barriers encountered were getting the City's contract submitted from consultant and approved. City has OBF contract for Council approval.

VII. Opportunities to Claim Energy Efficiency through Non-resource Programs

1. Energy Efficiency Improvements in Municipal Facilities and Operations- Municipal Facilities projects are being evaluated for energy savings by comparison to past billing and current billing after projects have been completed. Estimates have been calculated and comparisons are being reviewed as projects are completed. Gym lighting retrofits have been submitted and rebates from SDG&E have been received.

2. Zero Net Milestones through Codes and Standards - Report to evaluate the current and proposed sustainable building program completed. Projects were reviewed to determine energy efficiency better than code, accuracy of energy calculations, and installation of renewable energy systems. The report also included policy recommendations to strengthen and improve the sustainable building program.

3. Investment in a Green City - Specific program achievements have been tracked through the quarterly reporting system and documentation provided with invoices. Broader program-level achievements are monitored through the General Plan Monitoring Report. Overall, the CPUC Partnership program was successful in furthering Green City goals as it allowed staff to leverage existing resources to achieve greater results that would have otherwise been impossible.

Balboa Park Energy Efficiency Program *and* Smart Energy Management Monitoring System (SEMMS) *formerly Energy Efficiency Marketing for the Clean Generation Program* - Parameters used for tracking program achievements: Monthly meetings with the Balboa Park Cultural Partnership to discuss progress and schedule. Quarterly updates kept progress current and accountable. As the project is implemented, energy saving data will reflect actual savings for each facility. Real time data will provide an accurate tool for demand response and energy saving opportunities.

SDGE3131 LGovP03 - County of San Diego Partnership Narrative

The County of San Diego (County)/SDG&E Energy Initiative Partnership Program is a non-resource program that provides a synergistic relationship between SDG&E and the County of San Diego to promote energy efficiency to County employees and citizens, businesses, organizations in the region. SDG&E provide resources including energy expertise and funding for initiatives. The County of San Diego provides unique community outreach opportunities, access to employees and showcasing at public facilities. Together, we are able to accomplish activities that would otherwise not happen.

The County is a public agency containing many large-scale departments that hold different roles in implementing the goals and objectives of the Partnership. The departments that are actively participating in the Partnership are:

1) Department of General Services (DGS)
2) Department of Planning and Land Use (DPLU)
3) Department of Parks and Recreation (DPR)
4) Department of Environmental Health (DEH).

Major initiatives included Strategic Energy Plan Implementation, Energy Retrofit Study and Pilot Program, Climate Action Plan Preparation, Green Building Incentive Program, PACE Initiation, Fluorescent Lamp Recycling, Green Business Program and Energy Efficiency Education and Outreach.

The major successes of the Partnership during 2012 were:

- Implemented first energy retrofit projects using SDG&E On-Bill Financing (OBF)
- Completed two large retrocomissioning projects under the PECI RCx Program and using OBF
- Exceeded Strategic Energy Plan goal for energy usage reduction
- Climate Action Plan adopted by the Board of Supervisors
- County operations greenhouse gas inventory completed for 2010 and 2011 into Climate Registry using SDG&E Cool Planet Program
- Collaborative Climate Web Portal Enabled
- Achieved Beacon Award interim recognition in 10 best practice areas
- Expanded County's Energy Trust Fund to over $1 million in deposits, largely from Savings By Design and Energy Efficiency Business Incentive checks
- Shared Energy Savings Adventures (teen education) curriculum with other local agencies

Several barriers continue to be worked on that impede the implementation of Partnership initiatives. Problems were also encountered that impacted the Partnership. These include:

- Supporting County department staff, such as contracting and legal, do not have expertise in energy efficiency program details
- DGS Project Management Division staff, contractor and our water and energy consultant had a high learning curve for the use of SDG&E On-Bill Financing
- DGS Project Management Division lost two project managers that were heavily involved in implementing energy efficiency retrofit and retrocommissioning projects

- Data collection for EPA Energy Star benchmarking is difficult to collect across an organization with 16,000 employees and 550 actively maintained buildings. Several building types are not available for a rating
- SDG&E's Technology Incentives program went through a period of delay due to late approval of the Demand Response portfolio which affected the Smart Building Pilot Project at the South Bay Regional Center. This delayed participation in the SDG&E TI Program but the County is still expected to receive participation incentives in the next program cycle
- The Department of Planning and Land Use was restructured to the Department of Planning and Development Services. All department management was replaced with personnel not familiar with the Partnership
- Residential PACE continued to be uncertain, making Energy Upgrade California more difficult to implement.
- Our CEC Loan for street lighting was delayed from being placed on the CEC Board agenda for approval several times due to various reasons beyond our control
- New business incentive and rebate catalog requirements requires educating contractors and staff of new requirements and limitations

Major program changes during 2012 included:

- DGS decision to end using a consultant for the Energy Coordinator position. Duties of this position will be performed by the new Energy Project Manager, when hired.
- DEH decision to halt Partnership participation in 2013. Primary reason was that DEH is an enforcement agency and the community outreach programs were not a good fit. DGS will continue the DEH kiosk initiative in 2013.
- DEH transitioned the fluorescent lamp recycling program from a collection program to an outreach program, since other avenues, such as big box retailers, now collect the used lamps.
- DPDS decision not to replace staff previously dedicated to administering all their Partnership initiatives. DGS has taken on the leadership role for ARRA continuation initiatives and Energy Upgrade California. Finance and General Government Group/Auditor-Controller has taken leadership in the community energy financing area. DPDS is focusing on Energy Codes and Climate Action Plan implementation.
- Climate Action Plan transition from preparation to implementation

The County participated with other local organizations and SDG&E to prepare a CPUC proposal to recognize a formal San Diego County collaboration, San Diego Regional Energy Partnership, for 2013-2014.

The County of San Diego met several program objectives:

- Climate Action Plan - adopted by the Board of Supervisors on June 20, 2012. The Plan addresses issues of growth and climate change through planning for decreased traffic congestion, better air quality, efficient use of energy and water, less solid waste generation, safer streets, more local amenities, and more local jobs. The CAP was designed to support the mitigation of climate change impacts and to comply with the General Plan Environmental Impact Report.
- Community Energy Audit Surveys – In 2012, Approximately 75,000 energy efficiency surveys were sent to targeted residential properties in the unincorporated county to promote

retrofits of energy efficiency components in existing buildings. Property owners who respond to the survey receive from SDG&E a personalized energy report identifying potential retrofit measures that could be taken to conserve energy.

- ARRA EECBG – All programs and projects that were part of the stimulus grant were completed by the end of 2012, some directly related to Partnership initiatives including the Climate Action Plan preparation, Energy Code training, County energy efficient retrofits, community energy efficiency retrofits, green building incentives and fluorescent lamp recycling.
- Green Business Kiosk – An informational kiosk was installed at DEH food and housing permit lobby, designed to deliver information to DEH-permitted food facilities on green business practices with a focus on energy efficiency. A second, portable kiosk is designed for DEH events.
- HCD Energy Efficiency Roadmap – Consultant report was completed to provide direction to HCD on how to make their residential portfolio more energy efficient.
- HCD Multi-Family Benchmarking Guide – For Asset Managers and Property Owners to compare their energy performance with other similar properties
- PECI Retrocommissioning – Completed retrocomissioning projects at the North County Regional Center and East Mesa Detention Facility. Both projects were financed through the SDG&E On-Bill Financing Program.
- Networked PC Power Management for desktop computers - Completed June 2012. Over 9,000 desktops impacted. SDG&E rebate was applied for and is being processed by SDG&E. Although no rebate will be received, the County is implementing power management on all new laptops.
- Smart Building Pilot Project - South Bay Regional Center was activated September 7, 2012. The pilot will continue for one year to compare energy and water savings to the pre-installation baseline.
- Energy Retrofit Projects – Virtually all T12 lighting eliminated from County facilities and upgraded to latest generation T8 lamp/ballast combination. Completed large therm project at the East Mesa Detention Facility. Obtained or applied for SDG&E rebates and incentives on all applicable retrofit projects.
- DGS Staff BOC Training - Participated October 2012.
- Overall Energy Usage Reduction – Exceeded (3.11 percent) our goal to reduce energy usage (electricity and natural gas) by 1 percent on a MBTU/SF basis in the FY11-12 fiscal year.

SDGE3132 LGovP04 - City of San Juan Capistrano Partnership Narrative

The City of San Juan Capistrano will partner with SDG&E's Energy Efficiency Local Government Partnership Program in order to reduce energy consumption, achieve long and short term energy savings goals, explore demand response opportunities, and serve as a model city for neighboring communities as a leader in sustainability.

The City of San Juan Capistrano has many channels to market SDG&E programs, so even though their program budget is small they are able to leverage existing resources to help get the word out about SDG&E programs. For example the City has many newsletters that are sent to either community members or city staff; they are able to put SDG&E program tips in these newsletters to

increase awareness of energy efficiency.

During 2012, SDG&E and the City hired a consultant to develop an energy master plan. All City facilities were audited and compiled in addition to a review of current City policies and long term planning documents which was put together into the first draft of the City's Energy Master plan. Because Council was not available before the end of 2012 to review and approve the document, staff has scheduled a 2013 meeting to finalize and adopt the document.

Due to staffing changes at the City of San Juan Capistrano and budget issues, the program faced ongoing delays and staff shortages. In 2012, the program picked up momentum, and city staff with SDG&E staff and Energy Master Plan consultant met regularly to keep the development of the energy master plan on track.

This partnership is tracking its program achievements through quarterly reporting, Strategic Plan Updates and number of education & outreach opportunities achieved.

SDGE3133 LGovP05 - Port of San Diego Partnership Narrative

Working to enhance the Port of San Diego's (Port) Green Port Program, the goal of the 2010-2012 SDG&E/Port of San Diego Energy Efficiency Partnership is to contribute to the Port's role in the region as an environmental steward. This will be implemented under the umbrella of the Green Port Program by maximizing energy efficiency on Port tidelands and providing Port tenants (a variety of commercial and maritime businesses), staff, and the public the tools to make a positive impact on increasing energy efficiency. The scope of work is comprised of five integrated elements: an Energy Efficiency Education and Outreach Program, Facilities Efficiency Retrofits, Land Use and Development Opportunities, a Tenant Program, and Program Management. The program components include energy efficiency retrofits and audits, staff training, tenant focused outreach, community based outreach, and Port wide plans to reduce the peak demand on the grid.

Work done through the partnership will be concentrated within the Port's five member cities: City of San Diego, Coronado, National City, Chula Vista, and Imperial Beach. These combined efforts will help reduce energy usage and help lower peak demands within the Port's jurisdiction.

During the third year of the Port's partnership, the Port was able to achieve many of the goals outlined in its PIP and identify innovative initiatives to further encourage energy efficiency within the Port's jurisdiction. One such initiative was the Green Business Network, a successful tenant outreach program that launched as the Green Business Challenge in 2011. To facilitate increased participation and engagement in 2012, the Port initiated one-on-one outreach to businesses. Each business received a phone call or in-person check in to discuss SDG&E programs, training opportunities, innovative energy efficiency best practices implemented at their place of business, and challenges they were encountering. This one-on-one assistance, in addition to innovative activities such as the Top Green Chef cook-off event amongst three Network restaurants, and valuable training and resources, caused Network membership to increase from 49 to 70 businesses in 2012. During the 2010-2012 funding cycle, these businesses received incentives from SDG&E, reducing their energy consumption. These tenants accounted for nearly 76% of the total electricity consumption and 49%

of the total natural gas consumption on Port tidelands.

To further support the continued growth and success of Partnership initiatives in San Diego County, the Port and the other Local Government Partners continued to collaborate on energy efficiency initiatives. Most notably, this has resulted in the formation of The Climate Collaborative-San Diego Region, which serves as a regional brand and web portal showcasing each partners climate planning and energy efficiency initiatives to the public. This collaborative approach allows the Port and other LGPs to share and incorporate best practices (such as bidding documents, program successes, etc.) and implement programs on a regional level, resulting in a greater consistency, efficiency, and streamlined program implementation.

The primary barrier for implementation in 2012 was limited staff resources and other high-priority projects. This resulted in a number of projects with significant energy savings being delayed to 2013. A firm schedule for such projects was established and communicated to management to ensure their successful implementation during the next funding cycle.

Port financial resources were also limited during 2012. This restricted Port cost share opportunities, which ultimately prevented the expansion of projects beyond energy efficiency. Increasing the project scope beyond energy efficiency allows initiatives to have a broader application and reach a larger audience. While the Port did not have a significant amount of capital to leverage as a cost share, it did leverage staff time for energy efficiency projects.

In an effort to continue the positive momentum of the 2011 Green Business Challenge, (the Port's tenant energy efficiency outreach program) and encourage ongoing sustainability efforts among Port businesses, the Port transitioned from the competitive challenge framework to the Green Business Network, intended to be a more sustainable format for the program. The Network continued to give members access to the valuable resources offered through the Challenge. Network members continued to be recognized for their sustainability initiatives through marketing opportunities on the website, videos, and press releases. In addition, the Port expanded the Network to offer energy efficiency technical assistance to further encourage participation in SDG&E Core Programs and remove barriers of Core Program participation.

The Port utilized a variety of metrics to track progress and program achievements. Those metrics include:

- *The number of attendees at Port organized trainings and participation in continuing energy efficiency education*. This is an important indicator for capacity building. In 2012, at least 178 people attended energy efficiency training as a result of this partnership. These trainings ranged from topic-based workshops to networking events facilitating idea sharing.
- *Participation in the Green Business Network*. During 2012, membership in the Network increased to nearly 70 Port tenants. These tenants accounted for nearly 76% of the total electricity consumption and 49% of the total natural gas consumption on Port tidelands. Over the 2010-2012 funding cycle, these businesses reduced their energy consumption demonstrating the significant positive impact of the program.
- *Facility energy efficiency retrofit progress*. The Port completed an exterior lighting study which identified over 1 million kWh in energy savings through the retrofit of fixtures from HPS and other inefficient technologies to efficient LEDs and induction. The plan will be

implemented in four phases, with the first phase addressing street lightings in 2013. The Port also made progress on the development of bidding documents in support of the facility energy efficiency retrofit project, which is anticipated to be implemented in 2013. T

- *Climate Plan development*. The Port made considerable progress on development of the Climate Mitigation and Adaptation Plan. The Port is the first port in the nation to address both climate change mitigation and adaptation in one comprehensive plan and can serve as a model for other ports developing their own strategies for reducing greenhouse gas emissions and adapting to climate change. Substantial work has been completed to create a draft of the Climate Plan; release of the draft is anticipated in 2013.
- *Development of regional outreach materials*. Regional projects made considerable progress this year, marked by the launch of the Climate Collaborative-San Diego region web portal (www.sdclimatecollaborative.org). The web portal will be expanded to other interested agencies and partners in 2013 to continue regional collaborations and demonstrate the leadership in climate planning and energy efficiency efforts in the San Diego region.

SDGE3134 San LGovP06 - SANDAG Partnership Narrative

The San Diego Association of Governments (SANDAG) Energy Roadmap Program offers local jurisdictions assistance in making their buildings and processes energy efficient, implementing state energy codes through access to training and workshops, and being a conduit to their constituents on available efficiency programs that help reduce energy bills and environmental impact of the community as a whole. The Program provides free energy assessments of government buildings, energy planning support, and online tools to monitor electricity, natural gas and transportation fuel use. It provides access to experts that can assist jurisdictions in taking the next steps to implement building improvements, petroleum reduction measures, planning measures, and community outreach. Each participating jurisdiction receives a customized Energy Roadmap that offers a detailed, comprehensive framework for saving energy at City government operations and in the community. Each Energy Roadmap is consistent with the California Long Term Energy Efficiency Strategic Plan; SANDAG's Regional Energy Strategy, which serves as the San Diego region's energy policy blueprint; the 2050 Regional Transportation Plan and Sustainable Communities Strategy; and Climate Action Strategy, SANDAG's first ever guide on the issue of climate change.

In 2012, the program was able to complete:

- Energy Efficiency Assessments (preliminary and Phase 2 audits) were completed for 4 jurisdictions (Coronado, National City, Del Mar, and El Cajon). At the end of 2012 Phase 1 audits were completed, and Phase 2 audits were in progress for Carlsbad.
- Energy assessments of SANDAG facilities were completed.
- During 2012, 67 "Energy Report Cards" (preliminary assessments) and 28 Phase 2 (more comprehensive) energy audits were prepared for municipal sites. Energy Report Cards established baseline electricity and natural gas usage at all sites and benchmarked all sites that could be benchmarked through the Environmental Protection Agency (EPA) Energy Star Portfolio Manager and the California End-User Survey (CEUS) for electricity and natural gas use.

- Energy Roadmap reports completed and printed for 5 jurisdictions (Oceanside, Escondido, Vista, Coronado, and National City). At the end of 2012, Energy Roadmap reports for an additional 2 jurisdictions under final review by City staff (La Mesa and Del Mar).
- SANDAG staff gave City Council presentations on Roadmaps at 2 jurisdictions (Escondido and National City).

The down economy has caused significant layoffs of city staff and increased work load for those remaining; therefore, development of each Energy Roadmap has taken longer than anticipated.

The program met its goal to track via maintaining a spreadsheet summarizing combined potential energy, monetary and greenhouse gas savings of all energy conservation measures identified in Energy Roadmap reports. At the end of 2012, combined potential savings from the energy conservation measures identified for 9 cities were accomplished. In addition, completed benchmarking and/or establishing natural gas/electricity consumption baselines using EPA Portfolio Manager, completed Phase 2 energy efficiency assessments, and completed rate assessments for the following cities:

	No. of Energy Report Cards and Municipal Sites benchmarked	Phase 2 Energy Assessments/ Rate Analyses Completed
Coronado	13	5
National City	11	8
Del Mar	8	3
El Cajon	18	7
Carlsbad	17	5
TOTAL	**67**	**28**

Housed all the documents related to Energy Roadmap in online file-sharing to allow: 1) SANDAG and EFM engineering team to track progress and share milestones on each city's roadmap; 2) Track the number of local jurisdictions that apply for and take part in SDG&E's on bill financing program (too soon to track at this time); 3) Track number of jurisdictions that make progress on the implementation strategies in their Energy Roadmap (too soon to track at this time); and 5) Track number of jurisdictions that us Energy Roadmap components to assist General Plan Update, Climate Action Planning, and other Sustainability Programs.

SDGE3135 LGovP07 - ICLEI Partnership Narrative

SCE, PG&E, SCG, and SDG&E have co-funded contracts with ICLEI, the Institute for Local Government (ILG) and the Local Government Commission (LGC) to provide a coordinated statewide program of workshops, technical assistance, a recognition program, and other means to allow local governments to share best practices associated with energy management. This statewide program is called the Statewide Energy Efficiency Collaborative (SEEC). Work performed in this program is coordinated with the statewide local government energy efficiency best practices coordinator, whose contract is also co-funded by the four IOUs.

The Statewide Coordinator position was established in Decision 0909-47, which was adopted in September 2009. It is funded by the investor owned utilities (IOU), but is embedded in and reports to ICLEI – Local Governments for Sustainability (ICLEI), the Institute for Local Government (ILG) and the Local Government Commission (LGC). The Statewide Coordinator is an employee of the Local Government Commission. The decision calls for the Coordinator to "facilitate a statewide focus both in gathering exemplary policies and practices, and tracking progress on a statewide level on government facility energy use, retrofits, and strategic plan metrics to be developed … The Coordinator should also work to advance and track progress on local government Strategic Plan strategies, and assess progress toward market transformation on local government building retrofits, reach codes, etc." The Coordinator was also directed to advise ICLEI, ILG, LGC and the IOUs on an annual statewide energy efficiency best practices forum.

LGC: The Local Government Commission (LGC) conducted a series of meetings, webinars and forums that provided both networking and educational opportunities for local governments on energy efficiency and climate change. The work focused on helping to implement the local government chapter of California's Long-Term Energy Efficiency Strategic Plan.

- The LGC conducted the 3rd Annual Statewide Energy Best Practices Forum on July 18-19, 2012 in Los Angeles, CA. 190 people attended. The forum was designed to encourage local officials to commit to greenhouse gas (GHG) reductions and energy efficiency.
- The LGC held 6 web-based workshops. 397 people participated in the web-based workshops. These workshops were topic based, focused on priority strategies and were open to all local governments and other interested individuals.
- The LGC worked with the IOU's to provide networking and educational events for local government partners from each utility. These meetings provided local government partners an opportunity to share success stories and lessons learned and learn from the successes of other partners.
- The LGC developed a SEEC webpage that includes information about SEEC, the annual forum, webinars, Partnership meetings, and energy efficiency stories and best practices. In 2012, the website received a total of 33,849 site visits.
- The LGC undertook several activities to leverage the SEEC partnership.

ILG: The following highlights the program successes and accomplishments of the Institute for Local Government during 2012. The successes include; program design and marketing, Workshops and outreach, and Recognizing Beacon Award participants' accomplishments.

- 44 cities and counties participated in the Beacon Award program
- Developed Google map for ILG website to identify participant cities and counties
- Created the Beacon Award Program Champion concept
- Created participant profile pages for each new participant, compiled information about their climate action planning, EE, and sustainability best practice activities.
- ILG participated in 18 workshops or conferences for local Governments.
- 32 Beacon participants have been recognized for accomplishments in various mediums
- Maintained a video library including over 50 videos, featuring over 60 city and county elected officials and staff.

- Created graphic icons for each of the ten best practice areas to enhance visibility and design
- Finalized 6 Whitepapers highlighting EE and sustainability

ICLEI: ICLEI – Local Governments for Sustainability achieved success in four areas in 2012:

- Resources. Released several resources for local government climate planning, including:
    a. *Milestone 5 Guidance, Measuring and Reporting Progress on Greenhouse Gas Emissions Reductions*
    b. Quick-Start Guide entitled the *Energy Efficiency Implementation Resource* Guide.
    c. Online resource for sharing Climate Action Plans at www.californiaseec.org.
- Tools. Completed the online Climate Action Planning Assistant (CAPA) tool, which assists local governments in choosing the most effective measures to reduce greenhouse gas emissions. The tool is user friendly and provides a platform for real time decision making, informed by the most current information.
- Trainings. Developed a series of short, on-demand training modules on the www.californiaseec.org website. The trainings highlight several climate planning topics. Conducted one webinar on climate action planning and the California Environmental Quality Act (CEQA). Hosted six in-person field trainings in Calexico, Imperial County, Eureka and the Redwood Coast.
- State Coordination. ICLEI formalized an agreement with the California Air Resources Board and the Governor's Office of Planning and Research (OPR) to place SEEC resources prominently among state resources for local governments as well as to engage in a long term strategic alliance in which all SEEC tools and resources are created in alignment with California state policy.

SLGEEBPC: The Coordinator provided three reports tracking the progress of local government Strategic Plan strategies.

- Coordinator completed 15 best practices fact sheets.
- Coordinator visited 40 of the 52 local government partnerships.
- Coordinator wrote 12 quarterly energy newsletters for local governments.
- Coordinator administered the local government pages on Engage360 until it was frozen, then develop a separate web page (www.EECoordinator.info) to house his products.
- Coordinator sent email alerts on 585 different topics to list of about 580 folks interested in local government energy programs.

SLGEEBPC: There have been a few problems dealing with both developing the best practices fact sheets and tracking the local government goals. The fact sheets have been difficult because local government staffing has been reduced and so getting the information and help from the local governments has been difficult. As for tracking, Goal 2 envisions reducing the rate of Title 24 non-compliance by half from 2008 to 2012, by half again by 2016, and to have full compliance by 2020. The problem is no one measured compliance in 2008, and no one has measured it since. For Goal 3, the Coordinator does not have access to municipal local government energy use, which calls for a reduction of 20% below 2003 levels by 2015, and 20% below 1990 levels by 2020. Also, the 2003 and 1990 levels of local government municipal energy use are not available.

ILG: *Continuing Local Agency Resource Constraints*: Resource (both staff and budgetary) limitations continue to constrain the ability of cities and counties to participate in the Beacon Award program.

Rigorous Criteria for Award: Because the Beacon Award includes rigorous criteria that include measurable reductions in greenhouse gas emissions in agency facilities and in the community, participants must prepare a "re-inventory" or updated inventory to demonstrate the greenhouse gas reductions. This can be a costly undertaking. The inventory tools developed by ICLEI will make it easier for more agencies to complete the re-inventories and thus move ahead in the Beacon process. The rigorous award criteria make the Beacon program different from other recognition program. In addition, the criteria reduce greenhouse gas emissions mirror and support California's statewide climate change and greenhouse reduction goals established by AB 32.

Political Climate: The rise of the Tea Party, Agenda 21 issues and the property rights movement has unexpectedly spilled over into the Beacon Award program. Several potential participating agencies have delayed or stopped their interest in participation as a result of vocal objections to sustainability and climate action planning from individuals (from both inside and outside the specific community) appearing at public meetings.

ILG: As a result of the challenges described above, the program process was modified slightly to respond appropriately and enable the program to move forward.

- Responding to resource constraints at the local level, one-on-one assistance to local agencies to help complete the application and information, data compilation steps for participants. Worked closely with the utilities in providing energy efficiency data for participants to make it easier for them to demonstrate the energy savings of the program.
- The Beacon Award Program Champion initiative launched in 2012 is a way to respond to limited staff resources at the local level. The Beacon Champions will help interested agencies complete the application process and compile information to help participants demonstrate progress toward an award.
- When requested, ILG provided resources about public engagement best practices and experiences of other agencies to help participants navigate the political challenges posed by those individuals raising the Agenda 21 concerns.
- As a result of the rigorous criteria and resulting time it takes an agency to achieve a full Beacon Award, resulted in recognition for "Interim Accomplishments." In 2012, conversations were held to re-brand the "Interim Accomplishments" as Beacon Spotlight Awards.

SEEC is a non-resource program. Each non-governmental organization (NGO) achieved the objectives set forth for them in 2012.

SDGE3136 LGovP08 - New Cities Partnership Narrative

The Emerging Cities Program (ECP) will build the capacity of local governments to engage in energy efficiency and will provide support to local governments and communities to achieve their energy use and GHG reduction goals. SDG&E will provide an integrated suite of program elements, including tools and technical assistance, to all cities and counties in the service area.

The Regional Parking Lighting Working Group (PLWG) concluded in 2012 resulting in regional specifications and updated outdoor lighting ordinances designed to maximize energy savings potential while minimizing nighttime impacts. The regional group is now engaged in developing specifications for post top/acorn fixture retrofits for downtown urban areas. As in 2011, the goal of these working groups was to leverage regional interest from Local Governments and Institutional Partners and other interested parties to network, share best practices, pool knowledge and share useful tools and templates to achieve very tangible results in terms of RFP's issued and retrofits installed in a compressed time period to leverage the ETAP technical support & incentives that were available as well as expiring ARRA funds.

The ECP program also developed a small grant program designed for small governments. The grant program focused on outreach and education to residents and businesses with a total of 5 grants issued. Additionally, the ECP program engaged in a joint outreach effort for the Orange county service territory in collaboration with the City of San Juan Capistrano and the California Center for Sustainable Energy focused on IDSM education for residents and businesses.

SDGE3137 Local02 - Local Island Program Narrative

The 2010-2012 Micro Grid Pilot will recommend and deliver specific single-family and multi-family EE and DR home improvement packages that will drive participants to Zero Net Energy. Auditors will be instrumental in the whole-house EE and DR upgrade process. The program will directly assist residential customers through progressive stages of energy efficiency planning and implementation including:

1. Education and information gathering;
2. Comprehensive home audit, which will generate a checklist of action items and a comparative analysis of energy- and cost-savings as well as DR and self-generation opportunities; and
3. Whole-house focused installation of energy measures, backed by strong financial incentives.

To begin, eligible customers will receive a free comprehensive audit that will include low-cost EE and DR solutions. The on-site audit will provide integrated solutions in energy efficiency, demand response, and self-generation, and will, in some cases, advise customers on other sustainability practices such as water conservation opportunities. The customer will receive a report that will contain multiple line-item recommendations, many of which will include leading- edge technologies such as LED lighting. The checklist of recommendations will also show potential energy- and cost-savings and whether or not a SDG&E rebate is available.

Successes:

- In 2012 the program had a total of 992 participants bringing saturation to 83%.
- A total of 253 compliments were recorded from participating customers satisfied with the program and overall service.
- The program continued to allow part-time residents to participate. The addition would help the program to meet the overall savings goal and provide additional customers with direct install measures.

- Hard-to-reach customers were contacted through persistent door-to-door efforts, multiple attempts by a telemarketer, mailers, newspaper articles, event presentations, and through calls to previous customers for referrals.

The program had the following fund shifts:

- $100,000 to support the Home Energy Efficiency Survey Program (HEES)
- $960,000 to support the Home Energy Efficiency Rebate Program

SDGE3138 Local04 - Local Sustainable Communities Narrative

This highly innovative pilot program was set to be SDG&E's flagship program providing the path for all other programs in meeting California's long-term energy efficiency goals, including zero net energy homes by 2020. This program was designed to enable market transformation resulting in measurable energy efficiency, integrated demand response, distributed generation, renewables and natural resource savings while optimizing long term ecological, social and economic health of California. It accomplishes this by comprehensively integrating the "vertical" development (buildings and their components) with the "horizontal" development (land and utility and transportation infrastructure) over the full planning horizon. This holistic approach to program design and implementation is coupled with a new management model and evolutionary improvements in energy, water and air quality savings over the project life.

The Sustainable Communities Pilot program had very little activity because the project (Rancho Mission Viejo) selected to partner with in the development of the Pilot itself did not progress. The objectives filed in the Sustainable Communities PIP were very much tied to the construction cycles of this master-planned project, which stranded the Pilot.

After a PIP addendum was filed to remove RMV as the sole possible beneficiary of this pilot, the SDG&E New Construction program staff identified and selected another project within SDG&E's service territory that met similar criteria and had an interested developer: Sudberry Properties, Inc.'s Civita. This project is a master-planned development that has a 10 year + build out schedule that includes a commitment to sustainability, energy efficiency, water conservation and clean transportation. A team was assembled within SDG&E to collaborate with the developer to prepare a consolidated offering of products, support, and assistance. Sustainable Communities Pilot contributed to this team by offering the types of support and services that were originally filed for in the Sustainable Communities PIP. These services include: design assistance; energy efficiency recommendations, strong coordination with the new construction incentive programs, third party verification, and tenant/owner educational efforts.

In addition to partnering with Sudberry Properties' master-planned community, Civita, the Sustainable Communities Pilot was also able to partner with KB Home on its Rancho Santalina development. This development was also committed to sustainability in residential new construction. One of the four model homes, built in the first phase of construction, was a net-zero energy home known as ZeroHouse. The Sustainable Communities Pilot team recognized the progressiveness of KB Home in offering a ZNE home as a repeatable option for the rest of the housing production. In supporting KB Home, the Pilot committed support to offset additional design and materials cost of

bringing ZeroHouse to market. This development participated in the California Advanced Homes Program in addition to the New Solar Homes Partnership. Pilot staff coordinated with program staff of both these incentive programs to ensure a smooth customer experience that leveraged individual program offerings to a cohesive sustainability-focused cooperation with KB Home. Building envelope, domestic hot water, appliances, and lighting were all enhanced for energy efficiency, yet every structural and cosmetic component of the home was made with sustainability and environmental impact in mind. Water savings through landscaping design and water reclamation was also highly prioritized by the developer which further warranted support through the pilot.

The Sustainable Communities Program developed a structured meeting schedule for all involved in the program along with a schedule of deliverables. The schedule has been amended to reflect the inactivity of the originally selected pilot project but as construction progresses in the newly selected project the activities and deliverables were documented and tracked. Given the challenges of offering pilot support at the correct phase of what is normally a design phase that is two to three times longer than the usual EE program cycle that the utility programs operate under, partnering with two local developers made 2012 a very successful year for the Sustainable Communities Pilot.

SDGE3139 Local05 - OBF Narrative

The On-Bill Financing (OBF) offering is a financing product designed to facilitate the purchase and installation of comprehensive[1], qualified energy efficiency measures by non-residential customers who might not otherwise be able to act given capital constraints and/or administrative and time burdens. Approved customers who install comprehensive projects are eligible to receive a full rebate or incentive from the participating programs and to finance the balance of comprehensive, qualified energy efficiency and demand response measures.

In August 2012, SDG&E marked a milestone with OBF, which at that time had helped 1,000 commercial customers since the utility pioneered the program in 2007 and now produces $10 million in energy cost savings per year. As of December 21, 2012, OBF has issued 1,110 loans

OBF continued to provide on-going quarterly vendor training on the OBF process and requirements. The OBF vendor trainings offer a two-way open communication channel between the vendors and OBF.

OBF also continues to coordinate with Assigned Account Executives, Partnership Programs and Third Party Programs to allow financing of approved measures and projects. Staff works closely with assigned accounts by providing outreach and participating in seminars, trade shows, quarterly meetings, and special projects.

SDG&E volunteered to help lead the effort with CA Utilities (Pacific Gas & Electric, Southern California Edison and Southern California Gas) to establish program consistency. SDG&E prepared a draft statewide OBF policy manual in collaboration with the other utilities. The effort to align OBF programs will continue into 2013.

[1] Comprehensive is defined as two or more distinct measure types not including CFLs or delamping.

OBF does not claim direct savings from installed equipment, but does calculate actual savings per project (for payback calculation purposes).

SDGE3140 Local06 - Local Strategic Development & Integration Narrative

In order to create market transformation in California, SDG&E is committed to the vision and goals outlined in the California Energy Efficiency Strategic Plan and the Commission Decision regarding Statewide Demand Side Management Coordination and Integration. The plans include customer segmentation, targeted program development and the integration of EE/DSM and emerging high efficiency technologies, coupled with integrated and comprehensive program design and theory. A qualified team has been assembled to support these activities and drive the direction of the programs through innovation and the inclusion of best practice recommendations. In addition, the Strategy Group will act as a coordinating entity to help with collaboration and integration of regulatory, program, technology and policy efforts.

The team will be responsible for overseeing activities associated with achieving strategic plan goals, ensuring the strategic plan itself is updated and provide relevant guidance and direction to program sector management as SDG&E works towards interim milestones and long-term goals. In addition, the program researches, manages and provides updates for the Open ADR portion of Codes & Standards, as well as being responsible for any IT Standards initiated and or approved within Customer Programs.

The program underwent a re-organization in 2012 that saw not only staff changes, but additional areas of responsibility folded into the group. A new Manager was appointed, who placed a renewed focus on the technology strategy surrounding programs and customers. Also added to the group was a Strategic Development Supervisor, who was brought on to guide the group through the additional responsibilities. The program initiated the Project Assessment Workshop, which required all customer program management to attend and the outcome was the strategy program's creation of capability modeling for all groups inside and outside customer programs. For each group, the modeling provides the analysis and assessment of business capabilities currently and needed in order to align with customer program strategies. Value scoring of capabilities as well as heat mapping proved invaluable to program personnel to assist in seeing better which capabilities were being effectively and efficiently performed and which were not. Through additional effort, the program successfully identified all related technology systems and processes utilized by each group so they can be aligned with strategies as well.

Strategy team took on the responsibility of the SDG&E's Statewide IOU IDSM Task Force representation. In compliance with Commission Decision 09-09-047, the team represents SDG&E on the SW Integrated Task Force and implements each of the eight integration tasks mentioned, as well as supplies regular quarterly reports and participates in monthly calls and activities to the Commission. Program members provide guidance and act as an ongoing information source for "Integration" activities among groups as customer programs moves towards a more holistic, integrated approach across all business lines. The team provided IDSM Program Performance Metric results for the 2010-2012 program cycle and created a SharePoint site to capture all IDSM related efforts.

SDGE3141 SW-C&SA - Building Standards Advocacy Narrative

The Codes and Standards (C&S) Program saves energy on behalf of customers by influencing improvements in energy efficiency regulations, improving compliance with existing codes and standards, and working with local governments to develop ordinances that exceed statewide minimum requirements. C&S program activities extend to all buildings and potentially any appliance in California, for both advocacy and compliance improvement. The C&S program aggressively supports the goals of the Strategic Plan, which highlights the role of C&S in meeting Assembly Bill (AB) 32 (Stats 2006, Ch. 488) objectives.

Coordination of internal and external C&S work is conducted as part of ongoing work. For example, development of Codes and Standards Enhancement (CASE) studies and US Department of Energy (USDOE) letters entail research, analysis, and coordination that encompass potentially any internal IOU program or activity, and collaboration with numerous state and national entities. Likewise, compliance improvement and reach code activities are coordinated internally and externally around specific initiatives. Coordination between IOUs is conducted through quarterly meetings and various weekly calls. C&S IOU staff share information with other internal groups to support collaboration and assist with integrated portfolio planning.

The Building Codes Advocacy is one of four subprograms of C&S that primarily targets improvements to Title 24 Building Efficiency Regulations that are periodically updated by the California Energy Commission. The subprogram also seeks changes to national building codes that impact CA building codes. Advocacy activities include, but are not limited to, development of code enhancement proposals and participation in public rulemaking processes. The program may coordinate with or intervene in ratings organizations that are referenced in Title 24; for example, the National Fenestration Rating Council, and the Cool Roof Rating Council.
In 2011, the statewide IOU team finalized and docketed 56 CASE studies for 2013 Title 24 rulemaking proceeding. In 2012, the statewide team continued its advocacy for the changes proposed in these CASE studies during the rulemaking period. As a result of these efforts, many of code changes proposed by the statewide team were adopted by the CEC in May 2012. The statewide IOU team provided extensive support to CEC for post-adoption implementation: compliance manuals, software, repository, and related implementation resources.

The 2012 savings goal for Building Standards Advocacy is on track.

SDGE3142 SW-C&SB - Appliance Standards Advocacy Narrative

The Appliance Standards Advocacy is one of four C&S subprograms that targets both state and federal standards and test methods: improvements to Title 20 Appliance Efficiency Regulations by the California Energy Commission, and improvements to Federal appliance regulations by the US Department of Energy. Advocacy activities include, but are not limited to, development of code enhancement proposals and participation in the public rulemaking process (Title 20), and comment letters based on IOU research and analysis (USDOE), and participation in direct negotiations with industry. Additionally, the program monitors state and federal legislation and intervenes, as appropriate.

In 2012, the statewide team supported CEC efforts which adopted standards for battery charger systems in January, 2012, and conducted research and analysis in support of future CEC rulemakings. Additionally, the statewide team conducted research and analysis on numerous federal standards and submitted comments:

- Submitted 17 letters to DOE on 16 rulemakings.
- Submitted 5 letters to EPA on 4 ENERGY STAR specification processes.
- Submitted 2 letters (ASHRAE and FTC) on 2 standards development activities.

The 2012 savings goal for Codes and Standards is on track.

SDGE3143 SW-C&SC - Compliance Training Narrative

Compliance Enhancement includes Extension of Advocacy (EOA) elements of building and appliance standards subprograms, and the Compliance Enhancement Subprogram (CEP) of C&S. While EOA targets improvements in compliance with building or appliance efficiency regulations and development of compliance infrastructure, CEP supports local government process improvement. Compliance improvement in buildings is achieved through education, training, and other activities targeting building departments and other building industry actors responsible for compliance. Activities may include development of "tools" and other elements of infrastructure that serve multiple compliance enhancement objectives. Improvements in compliance with appliance efficiency regulations are achieved through communications, outreach, and other activities targeting manufacturers, retailers, and other California suppliers.

In 2012, the statewide C&S team delivered 79 role-based training sessions, continued a compliance improvement advisory group (CIAG) to provide industry guidance to IOUs, and supported improvements to certified energy analyst (CEA) examinations. The C&S team also completed the statewide building department Title 24 energy code compliance best practices program which explored in depth the enforcement barriers faced by seven representative local building departments. Also, the team developed, implemented, and evaluated customized tools and processes to help improve code compliance.

The 2012 savings goal for Codes and Standards is on track.

SDGE3144 SW-C&SD Reach Codes Narrative

The Reach Codes subprogram of C&S provides technical support to local governments that wish to adopt ordinances that exceed statewide Title 24 minimum energy efficiency requirements for new buildings, additions, or alterations. Support for local governments includes research and analysis for establishing performance levels relative to T-24 and cost effectiveness per Climate Zone, drafting of model ordinance templates for regional consistency, and assistance for completing and expediting the application process required for approval by the CEC. The subprogram also supports local governments that seek to establish residential or commercial energy conservation ordinances for existing buildings.

In 2012, the statewide IOU team provided technical support to 34 local governments that adopted Reach Codes and completed the required CEC approval process. The 2012 savings goal for Codes and Standards is on track.

SDGE3145 SW-HVACA - Residential Energy Star Quality Install Narrative

The Residential Energy Star Quality Inspection Program addresses residential installation practices to ensure that equipment is installed and commissioned per industry standards. The Program requires ACCA Manual J heat load calculations, Manual S equipment selection, and ENERGY STAR commissioning of the equipment. Contractors receive intensive classroom and field training from the Program. To ensure quality of work, there is thorough third-party review of contractors' HVAC designs and random in-field inspections of the installations.

San Diego Gas & Electric (SDG&E) worked with the Statewide IOU HVAC Committees and through the Western HVAC Performance Alliance (WHPA) on the development of the ES Quality Installation program. SDG&E worked with Southern California Edison (SCE) to analyze saving and TRC potential by climate zone. SDG&E reviewed statewide protocols on program implementation (contractor training logistics, quality assurance, tool analysis, metrics, etc.). SDG&E also met with ENERGY STAR to review mandated parameters for program launch.

SDG&E utilized the experience of Southern California Edison (SCE) to create a similar Quality Installation program model. The Program was able to leverage qualified contractors from SCE's territory to transition into SDG&E's territory quickly. A successful training process was already established by SCE that could be replicated for the new contractors within SDG&E territory.

The Residential ENERGY STAR Quality Installation Program's 2011 Draft SDG&E work papers have shown relatively low savings. This has caused a low potential TRC for the program. The Program has been investigating ways to increase the potential TRC for the program. The statewide effort to accurately quantify the average residential HVAC installation baseline and ENERGY STAR Quality Installation energy savings was guided by the WHPA.

The current residential HVAC market in SDG&E territory generally does not pull permits, have the proper HVAC tools, perform heat load calculations, understand proper equipment selection procedure, or comprehensively commission their installation. Contractors are required to invest a significant amount of time in classroom and field training, and increase their installation bid amounts to cover the additional work. Many contractors are unwilling to purchase the tools, pull permits, commit to the training, and increase their installation bids to customers.

In 2012, there was a higher adoption of the highest Quality Installation tier level of efficiency than expected. Most of the residential customers purchased equipment in the highest efficiency category.

SDG&E continued to use Microsoft project management software to track the design, launch, and critical tasks for the program. The parameters used to track achievements were limited to implementation and logistical program design. There was tracking of the quantity and type of each Residential ENERGY STAR Quality Installation measure completed.

- Due to the increased technical requirements in the AC Quality Care, the program needed to start over recruiting and training HVAC contractors for participation.
    - AC Quality Care opened in Q3 2011 and required recruiting contractors to go through new screening, training, and certification to meet program requirements.
- Low HVAC technician skill level in industry
    - AC Quality Care requires aggressive training and mentoring of technicians for the Quality Installation program. The program has found that the average skill level of HVAC technicians is well below the skill level required to complete Quality Installation measures.
- Expanded HVAC tool requirements for Quality Installation Program creates delays and/or prevents participation for many HVAC contractors.
    - The average HVAC technician is not equipped with all necessary tools and tools with the required level of accuracy. HVAC contractors are often unwilling to invest money to purchase the tools required for each technician.

SDGE3146 SW-HVACB - Commercial Quality Installation Narrative

The HVAC Commercial Quality Installation (QI) Program addresses commercial installation practices to ensure that equipment is installed and commissioned per industry standards. The program is being implemented through a third party program, Premium Efficiency Cooling Program.

The third party program implementer participated in numerous stakeholder meetings aimed at developing practical steps for integrating ACCA Standard 5 into the 2010-12 programs. Although a statewide Quality Installation Standard is yet to be finalized and adopted, the program implemented key components of quality installation into its upstream, midstream and downstream incentives, including permitting and benchmarking requirements over the past three years and training and incentives for ACCA Standard 5 Quality Installation introduced in March 2012. Program development activities for the QI subprogram included research and development of standards, potential energy savings, and technical specifications, conducting surveys and interviews with contractors, and summarizing results. Although much of the foundational research was conducted between February and June 2012, follow-up surveys and interviews were performed and results compiled between July and September.

Integrating industry standards into a utility-implemented Commercial HVAC Quality Installation program involves several key players and activities. With the Title 24 revisions in progress, and estimated adoption of ANSI standards by 2014, leadership for a statewide installation standard has been delegated primarily to the Western HVAC Performance Alliance (WHPA). Taking the lead on several of the pre-implementation activities including integration into applicable IOU Workforce Education and Training programs by Q1 2012 and the simplification of compliance options by Q4 2012, the WHPA has begun to lay the groundwork for program development activities planned for 2013.

The main implementation barriers thus far have been a lack of industry consensus on a statewide standard. Moreover, much of the ACCA 5 standard recommended by the WHPA committee has limitations with respect to non-residential applications and yields minimal energy savings above and

beyond Title 24 mechanical installation requirements. SDG&E has been working with the statewide IOU team to address these barriers, and the WHPA has recently reconvened discussions on the limitations of the ACCA 5 standard. Several standards are applicable to commercial HVAC installations and proper sizing, ductwork corrections and sealing, including ASHRAE, ACCA, BPI, and SMACNA standards. In addition to participation in WHPA QM protocol development meetings in 2010, SDG&E assessed the applicability of industry pathways and areas of consensus among industry actors. This included continued work with PG&E and SoCal Gas in crafting protocols for a statewide Nonresidential QI standard.

Quality installation measures that have been implemented through mid-stream and downstream channels include matched system requirements in split-system installations and refrigerant testing in newer units, delivered as part of the QM program. Contractors have been reluctant to incorporate the ACCA 5 Standard into their installation practices, and have reported that customer demand for upscale installation services is weak to non-existent. Most HVAC replacement continues to be performed without permits and customers and contractors are reluctant to pull permits for emergency replacement. Industry standards for "quality" installation vary considerably, and the ACCA 5 Standard is only one of a multitude of industry standards for quality installation. Market confusion, information asymmetry and low customer demand for premium installation services make QI difficult to sell, and contractor interest, weak.

To support the adoption of voluntary industry installation standards, QI program was rolled out March 21, 2012. The QI program includes four main components:

1. financial incentives to contractors for completing system installation in accordance with appropriate industry standards
2. active enrollment and promotion of qualified contractors
3. contractor support
4. contractor training on quality installation practices, selling and marketing QI/QM and service management of QI/QM. Additionally, contractors were offered technician training reimbursements for NATE training, ACCA Quality Assured training and certification, or related activities.

Program objectives including program development, research and contractor input and feedback were met. A portion of funds for Quality Installation standards development and training activities is non-resource. These funds are used to support program development and participation in industry-wide protocol development and will be used to support the delivery of comprehensive Quality Installation services in 2013. Non-resource program achievements include numbers of contractors trained, number of participating contractors, number of training meetings held, and number of non-resource measures delivered.

SDGE3147 SW-HVACC - Commercial Upstream Equipment Narrative

The Commercial Upstream Equipment Program offers incentives to distributors who sell qualifying high-efficiency HVAC equipment. The upstream equipment and program incentives were implemented through a third-party program, the Premium Efficiency Cooling Program. The third-party program offered incentives for upstream equipment, downstream/midstream equipment, and

quality maintenance measures.

Program strategies that worked well included improved code compliance and customer/contractor awareness. In order to support upstream stocking and sales activities, the program offered distributors incentives for premium efficiency equipment sales; to support code compliance and permitting activities, the program provided split incentives to distributors and installing contractors for providing project installation data. Although this worked well in increasing permitting and compliance, participation in the program suffered.

The main implementation barriers in 2012 stemmed from rigorous program participation requirements intended to increase customer and contractor awareness, reduce free ridership and support permit compliance. These activities left fewer and fewer incentives on the table for distributors to claim.

Direct marketing to downstream participants, particularly schools and government buildings, also led to decreased incentives available for distributors. As schools and government buildings became aware of the program, incentives were shifted to downstream customers, reducing the total pool of sites eligible for upstream incentives.

Permitting requirements for contractors created additional barriers, as contractors who had not pulled permits were not eligible for incentives and had little motivation to assist in providing data or access for upstream incentives.

This year, several locations installed HVAC units in conjunction with large solar PV projects. Difficulty ascertaining whether the HVAC units were powered by solar resulted in disqualifying projects where the power source was unclear.

Budget availability was limited through most of 2012, but additional funds were made available by the end of October. The program opened an “upstream window”, accepting applications from distributors and manufacturers in November-December, using the upstream-midstream option where distributors submit data on behalf of contractors and collect half of the incentives.

Although the scale of the upstream program was limited, the upstream program was successful in supporting distributor stocking and sales of high-efficiency equipment. A small portion of funds for the Non-Residential Upstream Equipment program are non-resource. These funds include administrative, marking and direct implementation activities to support upstream awareness, standards development, sales and stocking. Program achievements are tracked using the SMART system and include numbers of units rebated, numbers of participating distributors, and inspection tracking data. SDG&E meets with the third-party implementer regularly to review performance objectives and key performance indicators.

SDGE3148 SW-HVACD - Quality Maintenance Program Narrative

The Statewide Quality Maintenance Development Program addresses residential and commercial maintenance practices to ensure that equipment is serviced per industry standards

and that the maintenance effort supports the long term strategic goal of transforming the trade from commodity-based to quality-based.

The non-residential QM resource program activities for quality maintenance developed measures in 2010 and 2011 that were implemented under the third party non-residential HVAC program. Eleven contractors have completed Commercial QM classroom and rooftop training since September 2011 when the Statewide QM program was introduced. This training included classroom training on sales and operations and rooftop training on customer sites.

In all, 59 buildings and 317 HVAC units are enrolled in the QM program. All units have completed inventory collection and maintenance agreement stages of the program, and services are planned for 2013.

The residential resource QM program activities for quality maintenance developed measures in 2010 and 2011 that were implemented under the third party residential HVAC program. The Residential QM program recruited, screened, and trained fifteen HVAC contractors to perform Quality Maintenance work. These contractors were required to meet program qualifications and each technician was required to pass standardized HVAC testing and pass in-field training performing Quality Maintenance on operational HVAC systems.

The non-residential QM program requires extensive documentation and verification activities including a series of documents to be provided by the customer and contractor, and a detailed inventory of information about each HVAC unit. This information must be verified on site prior to payment of the first 20% of customer incentives. Upon initial payment, contractors have six months to complete program services. Only two contractors have successfully sold the required three-year maintenance contracts to their customers and none had completed maintenance activities by the end of 2012.

The implementation barriers encountered in the QM Program include (a) information asymmetry, (b) cost and risks borne by participating contractors, and (c) industry resistance to mid-cycle program change. Contractors require additional customer education support to market the value of ongoing maintenance, easing the information asymmetries in the market. While contractors were very successful at creating demand for a comprehensive tune-up, they have had difficulty marketing the statewide QM service. Costs and risks borne by contractors include additional data collection and data entry costs and uncertainties about their exposure over the three-year payment program. (If customers do not authorize repairs needed to maintain units over this period, incentives are not paid.)

Other problems encountered involved the Maintenance Planning System, a statewide database for QM tracking and reporting. These included the omission of data fields for contractors to provide refrigerant test data for multi-circuit units, disabled contractor reports and notices for outstanding tasks, and contractor difficulty with rooftop data collection. Contractors found the 56-page (per HVAC unit) field form unwieldy, and online data entry required navigating countless screens.

The Residential QM program actively outreached to around 200 HVAC contracting firms and

found no company that followed ACCA Standard 4 for their maintenance. HVAC contractors and residential customers had low interest in participation to pay for the ACCA Standard 4 assessment and additional Quality Maintenance items.

The non-residential QM program was changed to address market acceptance. Because internet connectivity may be weak on some rooftops, and the 56-page maintenance questionnaire was unilaterally rejected by contractors, CSG created a single-page online form intended for back-office use for those contractors who preferred to use a paper form in the field. The modified paper form (six pages per HVAC unit) offers technicians a more manageable data collection tool, and may be completed by technicians in the field or on laptops or tablets without an internet connection. Until the Maintenance Planning System is configured for electronic data transfer, any data collected on these paper forms or through the single-page online form workaround must be data entered by the contractor or the implementer into the statewide database.

The Residential QM program revised the measure groupings to create a no-cost entry package with energy savings to increase HVAC contractor and residential customer participation. This adjustment increased the rate of participation more than twenty times the average rate over the previous eleven months.

A portion of the program is non-resource and is used to support protocol development, statewide alignment and data collection. Subcontractor Management and Report Tool (SMART) is use to tracking program accomplishment and goals. Program management is in contact with the program implementer on a weekly basis to discuss key performance indicators.

SDGE3149 SW-HVACE - Technology & Systems Diagnostics Narrative

The SW-HVACE – Technology System Diagnostics Advocacy (HTSDA) Program is a coordination and advocacy program that addresses the technical elements critical to increasing the market introduction of advanced cooling and fault detection and diagnostic (FDD) technologies.

San Diego Gas & Electric (SDG&E) is currently working with the Statewide IOU HVAC Committees individually and through the Western HVAC Performance Alliance (WHPA) on all Statewide Performance Implementation Plans (PIP's) for implementation and logistics. SDG&E is currently engaged in several committees and industry organizations to solicit industry feedback on existing programs and facilitate the development of reach codes and best practices to enable emerging HVAC technologies such as FDD, IDSM enabling systems, products for hard-to-reach markets, and climate specific HVAC.

Each utility has collaborated or coordinated efforts on different projects and results are being evaluated and can be incorporated into the State-wide programs through the Western Cooling Efficiency Center (WCEC) at UC Davis. SDG&E also continues to support the WCEC through its engagement in the executive and advisory committees for the center. Currently SDG&E's TSDA is currently engaged in evaluating multiple technologies and strategies in addition to participating in aforementioned committees. Some technologies that have been or continue to be evaluated in a conjunction with the Emerging Technologies Program (ETP) are:

- Advanced hybrid indirect evaporative cooling enabled climate specific HVAC systems.
- Residential and Commercial potential IDSM enabling Variable Refrigerant Flow HVAC systems.
- Thermal Energy Storage devices for Permanent Load Shift in conjunction with advanced efficiency HVAC units.
- Hybrid evaporative cooling residential HVAC unit.
- Integration of multiple advanced HVAC units with Advanced IDSM and FDD enabling Building Management Systems.

Moving forward beyond the 2010-12 program cycle these projects will continue to be managed and reported by the ETP, as the HTSDA program has been integrated with the ET Program.

The ETP goals have aligned closely with HTSDA objectives allowing for successful collaboration Statewide and ability to meet the Program goals. Some persistent challenges for these advanced testing programs remain, such as: limited staffing resources, difficulty finding customers willing to engage in new technology testing, and other project administrative challenges typical to engaging with so many diverse technologies, customer types, and industry representatives.

The HTSDA Program has been very successful at engaging in activities to meet the objectives laid out in the PIP. Collaborative efforts between programs internally, inter-utility, and with research and industry organizations are noteworthy and these efforts will be continued as the HTSDA program is consolidated with ETP for PY 2013-14. As HVAC technology performance is very much dependent on weather conditions and climate, many of the technology assessments have multiple year testing periods. As such, most of the direct technology assessments efforts are ongoing and will also be bridged to the ETP for PY 2013-14.

SDGE3150 SW-HVACF - HVAC WE&T Narrative

The HVAC Workforce Education & Technology (WE&T) Program offers education and training opportunities targeted at all levels of the HVAC value chain.

San Diego Gas & Electric (SDG&E) is currently working with the Institute of Heating and Air Conditioning Industries (IHACI), North American Technicians Excellence (NATE) and Air Conditioning Contractors of America (ACCA) to provide training and certification for contractors, technicians and industry players. The following courses were offered through Workforce, Education and Training to aide in this process during 2011:

- Efficient Air Conditioning & Energy Management Systems
- System Diagnostics Module– Four Part Series
- System Performance Module – Four Part Series
- NATE Core Module – HVAC Basics – Two Part Series
- NATE Core Module – Gas Heating – Two Part Series
- NATE Core Module – AC & Heat Pumps – Two Part Series
- NATE Core Module – Air Distribution – Two Part Series

All training was enthusiastically embraced by those seeking certification and industry professionals

for additional training. Additional training was provided through the third-party non-residential and residential HVAC programs.

The non-residential Premium Efficiency Cooling Program provides classroom and rooftop technician training in Quality Maintenance (QM) Services and a classroom workshop on Quality Installation (QI). QM training introduced participants to ANSI/ASHRAE/ACCA Standard 180 maintenance and inspection protocols for commercial HVAC units. Training included hands-on diagnostics and standard maintenance procedures and minor repairs. Participants included 18 sales and service technicians from nine commercial HVAC contractors. Ongoing contractor training included program operations, sales and technical skills and additional training meetings with each of the participating contractors. QI training was attended by 12 contractors.

Residential Quality Maintenance and Quality Installation courses offered in the AC Quality Care program were provided through three classroom series, 30+ online courses, in-field training, and ongoing mentoring to all participating HVAC contractors and their technicians. This training covered technical, customer service, and programmatic elements of Quality Maintenance and Quality Installation.

One of the barriers faced in the implementation of this program, additional facility space is needed to accommodate all that have shown interested in this industry certification.

Although the third-party technical training for commercial HVAC contractors was comprehensive, additional rooftop training will be required when contractors begin work at job sites. This will enable larger numbers of technicians to be trained while servicing units. The prominent barrier to intensive rooftop training is that contractors are reluctant to dedicate technicians to unpaid training activities held during work hours. The SDG&E service area lacks a comprehensive, hands-on HVAC training center for technicians to learn real-world residential applications of HVAC theory. Another barrier is the availability of technicians to attend training series. Successful HVAC contractors and their technicians often have minimal availability during business hours and require special arrangements for meeting their training needs.

Participants are required to reserve space in advance through an online registration system, sign in at the time courses are offered and certificate of attendance are issued at the completion of course. We are able to track not only participation, we also capture participates occupation, company and title.

SDGE3151 SW-HVACG - HVAC Core Narrative

The statewide Residential and Commercial HVAC Program delivers a comprehensive set of downstream, midstream, and upstream strategies that builds on existing program, education, and marketing efforts and leverages relationships within the HVAC industry to transform the market towards a sustainable, quality driven market. Market transformation and direct energy savings and demand reductions are achieved through a series of six sub-program that make up the comprehensive program approach.

As stipulated in the co-programs, the program has successfully recruited, organized, and managed

the different elements to achieve the goals as set forth in the California Energy Efficient Strategic Plan.

SDG&E worked with the Statewide IOU HVAC Committees individually and through the Western HVAC Performance Alliance (WHPA) on all Statewide Performance Implementation Plans (PIPs) for implementation and logistics. SDG&E was also engaged with industry feedback on existing programs. In addition, SDG&E involved several internal partners to assist in the transformation processes. Because of its limited program budget, SDG&E determined that utilization of internal partners and continued coordination with the statewide team is necessary for future program success. All HVAC Core program activities aligned with the CA Long Term EE Strategic Plan, Big Bold Strategy and the HVAC Action Plan.

SDG&E is currently working with the Statewide IOU HVAC program teams individually and through the Western HVAC Performance Alliance (WHPA) on all Statewide 2010-2012 Statewide PIP's for implementation and logistics. During 2012, SDG&E and the IOU HVAC program teams individually and through the Western HVAC Performance Alliance (WHPA) collaborated on the development of the 2013-2014 HVAC programs. During the filing, the HVAC programs were moved accordingly under the CALSPREE, Commercial, WE&T and Emerging Technologies PIP per CPUC's direction for the 2013-2014 Transition Period. SDG&E held multiple Program Advisory group sessions to collaborate with WHPA and other stakeholders to gain feedback on the program design.

San Diego Gas & Electric has also involved several internal partners to assist in the transformation processes. As stipulated in the co programs we have successfully recruited, organized, and manage the different elements to achieve the goals as set forth in the California Energy Efficient Strategic Plan, Big Bold Strategy and the HVAC Action Plan.

The HVAC Core program was impacted by transition period of the WHPA staff contract which caused some delays in the scheduling of the 2012 committee and subcommittee meetings. In late 2011, the WHPA Steering Committee was transitioned to an Executive Committee and a Council of Advisors. During early 2012, the Executive Committee and Council of Advisors were developing their key roles and deliverables for 2012. This new committee structure was designed to streamline the WHPA processing of key deliverables to IOU program staff.

SDG&E program teams use Project Management tools to track the goals as set forth in the program implementation plan and the California Energy Efficiency Strategic Plan, Big Bold Strategy, and HVAC Action Plan.

SDGE3152 SW-IDSM - SW Integrated DSM Narrative

The California Long Term Energy Efficiency Strategic Plan (Strategic Plan) recognizes the integration of demand-side management (DSM) options including energy efficiency (EE), demand response (DR), and distributed generation (DG) as fundamental to achieving California's strategic energy goals. To support this initiative, the IOUs have identified integrated DSM (IDSM) as an important strategic DSM policy priority and have proposed a series of activities, pilots and other

programs in response to the Strategic Plan DSM Coordination and Integration Strategy.

An IOU and Energy Division Statewide Integration Task Force (Task Force) will coordinate activities that promote, in a statewide-coordinated fashion, the strategies identified in the Strategic Plan and the eight integration directives described in the EE decision as follows:

1. Development of a proposed method to measure cost-effectiveness for integrated projects and programs including quantification and attribution methods that includes GHG and water reductions benefits and the potential long-term economic and electric/gas hedging benefits.
2. Development of proposed measurement and evaluation protocols for IDSM programs and projects.
3. Review IDSM enabling emerging technologies for potential inclusion in integrated programs.
4. Development of cross-utility standardized integrated audit tools using PG&E's developed audits as a starting point.
5. Track integration pilot programs to estimate energy savings and lessons learned and develop standard integration best practices that can be applied to all IOU programs based on pilot program evaluations and the results of additional integration promoting activities (i.e., EM&V and cost-benefit results).
6. Develop regular Reports on progress and recommendations to the Commission.
7. Organize and oversee internal utility IDSM strategies by establishing internal Integration Teams with staff from EE, DR, DG, marketing, and delivery channels.
8. Provide feedback and recommendations for the utilities' integrated marketing campaigns including how the working group will ensure that demand response marketing programs approved as category 9 programs are coordinated with EE integrated marketing efforts.

<u>Strategies Implemented In 2012:</u>

- Further efforts on developing integrated cost effectiveness and EM&V methodologies are on hold pending direction from the Energy Division.
- The Task Force tracked multiple integrated emerging technologies and reviewed various programs, projects, IDSM Pilots and activities to identify integration efforts and opportunities, as well as developed best practices.
- The IOUs submitted four joint quarterly reports for 2012, including an Executive Summary section, to provide Energy Division staff with updates on the eight IDSM directives. All 2010- 2012 quarterly reports were uploaded and available for viewing on EEGA.
- The statewide IDSM Task Force held regular coordination phone calls and met in person on a quarterly basis to review the status of the various support activities for this IDSM initiative.
- The IOUs have delivered about 475 integrated collateral pieces, campaigns, outreach events, and website efforts to residential and business customers that promote multiple programs across EE, DR, DG and/or AMI.
- In addition to the meetings described above, the IOUs have coordinated on a Statewide basis in several areas:
    - The SW Online Integrated Audits team coordinated to deliver a consistent online integrated audit tool that works with each IOU interface and educates customers on managing their energy use costs. The IOUs also enhanced existing tools to include solar requirements.

- The SW Onsite Integrated Audits team is collaborating to share approaches and best practices and to discuss ongoing collaboration. The IOUs continue to offer onsite integrated audits to small, medium and large customers.
-

The SW Integrated Marketing team meets on a regular basis to discuss integrated efforts, best practices and to identify opportunities for coordination

<u>SDG&E's IDSM efforts included:</u>

- On-going IDSM training for Program, Marketing and Sales staff that have effectively increased understanding of IDSM concepts, approaches and CPUC directives
- External IDSM training through our Energy Information Centers and Trade Professional groups
- Coordination on a statewide basis to deliver an integrated audit tool with consistent business requirements. SDG&E launched the residential tool in May of 2012 and was granted an extension by the CPUC to deliver the Small Medium Business (SMB) tool by end of Q2 in 2013.
- Document and report CPUC regulatory mandates.
- Liaisons on integrative efforts between departments/sectors/teams/groups.
- Investigate existing and new ideas on integration at SDG&E and find out where we are already integrating and pushing the messaging.
- Collaborate across departments/ sectors/teams/groups.
- Integrated marketing campaigns and collateral continued throughout the year for business and for residential / smaller business customers.
- The ESAP and Residential EE staff developed IDSM curriculum for 2012 that included: employee training, integrated marketing and program leveraging.
  - Cross training of program personnel so they are familiar with offerings
  - Integrated marketing
  - Program leveraging
  - The plan identified potential program synergies through the use of common delivery channels
  - Delivery channels may include:
  - Contractors
  - Retailers
  - Non-utility program administrators
- Continued efforts on Integrated Pilots:
  - A new project was added in Q4, KB Home - Rancho Santalina- SCP partnered with KB Home to provide financial assistance to offset design costs associated with creating a repeatable track home design that achieves ZNE.
  - Micro-Grid Residential and Nonresidential
    - The program in total totaled 974 residential and 48 commercial customers combined for a total of 1,022 participants that saved 1,044,256 kWh and a total demand reduction of 363.4 kW.
    - Completed on-site activities and is now focusing on final analysis and reports.
- Continued Integration Efforts:

- Statewide Energy Efficiency Collaborative (SEEC Partnership) including the Local Government Commission (LGC, the Statewide Local Government Energy Efficiency Best Practices Coordinator (SLGEEBPC), ICLEI and ILG have all continued progress and will continue into 2013-14
- The California Energy Commission's New Solar Homes Partnership (NSHP) is part of the comprehensive statewide solar program, known as the California Solar Initiative. The NSHP provides financial incentives and other support to home builders, encouraging the construction of new, energy efficient solar homes that save homeowners money on their electric bills and protect the environment.
- The requirement is that participants in the NSHP must meet or exceed 15% of current Title 24 standards. To integrate EE prior to solar installation, the EE Residential New Construction (RNC) subprogram of the Statewide New Construction PIP aligns with the CEC's EE requirements for NSHP. The intent of both programs is to increase EE and solar in residential new construction by making it easier for builders to participate in both programs and maximize the efficiency of their homes.

The continued effort of expanding IDSM is finally being seen. SDG&E's latest reorganization in 2012 has resulted in IDSM reaching beyond the borders of customer programs and adoption into other divisions of SDG&E, while maintaining a strong link to customer segments. Employees will continue to participate in and receive a refined curriculum of integration training based on need and job scope, which in turn will ultimately benefit the customer.

SDGE3153 SW - ME&OB - SW Marketing, E&O FYP Narrative

The purpose of the Marketing, Education and Outreach (ME&O) program is to increase utility consumer awareness and participation in cost-effective energy-saving activities offered by the utilities. ME&O promotes behavior changes that result in energy management efforts that save energy and reduce greenhouse gas (GHG) emissions in coordination with demand response and renewable self-generation options. To be successful, ME&O must move consumers through a transitional process from awareness and knowledge of energy efficiency to action.

The purpose of Marketing, Education and Outreach (ME&O) is to increase utility consumer awareness and participation in cost-effective energy-saving activities offered by the utilities, as well as to promote behavior changes that result in energy management efforts that save energy and reduce greenhouse gas (GHG) emissions, in coordination with demand response and renewable self-generation options. To be successful, ME&O must move consumers through a transitional process from awareness and knowledge of energy efficiency to action.

PPM ID	Program ID	Program Performance Metric (PPM)	Metric Type
MEO-1	SDGE3153	Awareness and knowledge of key elements of the Engage360 brand among customer groups specifically targeted by grassroots and social networking phase of the program.	2a
MEO-2	SDGE3153	Awareness and knowledge of energy efficient actions promoted by the ME&O program among customer groups specifically targeted by grassroots and social networking phase of the program.	2b
MEO-3	SDGE3153	The number and type of energy efficient actions self-reported by customer groups specifically targeted by grassroots and social networking phase of the program.	2b

Following the introduction of the new statewide ME&O brand and website, Engage 360, in late 2010, the brand was launched in 2011 with emphasis on grassroots efforts, including the following activities:

- Influencer Outreach
- Community Outreach
- Events
- Social Media
- Public Relations

Engage 360's success relied on the efforts of dedicated community leaders (Influencers) and volunteers throughout the State to help spread the message and empower Californians to take action--a collaborative effort that relied heavily on social engagement. (Grassroots would serve as the first phase of a two-phase launch that would include mass media to be strategically introduced later in the campaign.)

As discussed below, the IOUs engaged in this statewide effort, as ordered in D.09-09-047 until Commissioner Ferron issued an Assigned Commissioner's Ruling Regarding Statewide Marketing and Outreach Program on October 13, 2011, suspending all ME&O activities until Commission Staff could provide recommendations on how to re-strategize the program.

The Influencer Outreach strategy, rolled out in early first quarter 2011, led to the successful recruitment of more than 320 individuals with leadership positions in major companies, universities, nonprofits and other community organizations. These were individuals whom others respected, admired and listened to and had the influence to encourage others to join the effort and to take action.

By end of second quarter, community outreach activities were initiated through three regional offices in Northern, Central and Southern California that served as hubs for community outreach, door-to-door canvassing and events to general and ethnic audiences.

More than 120,000 conversations were initiated with Californians, through nearly 10,000 homes reached through door-to-door efforts; Engage 360 had a presence at more than 440 community events, and nearly 10,000 commitments were achieved as part of the "Asks" strategy to take action. In-language collateral materials branded with Engage 360 were created to initiate and facilitate dialog with individuals.

Social media platforms were introduced on Facebook and Twitter and these platforms along with Engage 360.com served as the online hub for building the movement and curating energy efficiency and conservation content, as well as distribution of original Engage 360 content. By late third quarter, there were more than 4,100 "Fans" on Facebook and nearly 70 Tweets that resulted in 431,000 impressions.

Public Relations activities were also initiated with multicultural audiences to raise brand/campaign awareness through media mentions, press releases, and inclusions in relevant stories. The focus of media pitches revolved around highlighting the summer actions and education of the community around energy efficiency information. Blogs were also utilized with the intent to raise brand/campaign awareness.

Earned media coverage as of late July resulted in an estimated 600,000 viewers. TV news segments on We are Fresno Live, Good Day Sacramento and blogs, San Marino Patch and Latinavista.com.

A Crisis Communications Plan was also created to protect the image of the brand and ensure prompt and accurate response in the event of an emergency.

While it was still premature to launch a full-scale mass media campaign in 2011, the second phase of the effort, targeted paid media, was recommended in third quarter to drive incremental awareness, interest and fuel groundswell. This tactical element, however, did not receive appropriate approval prior to Commissioner Ferron's directive to the IOUs on September 26, 2011 to stop all program activities and bring outgoing program costs to zero.

An *Assigned Commissioner's Ruling Regarding Statewide Marketing and Outreach Program* was issued October 13, 2011, which officially suspended all ME&O activities until Commission Staff could provide Commissioner Ferron recommendations on how to re-strategize the program. Parties were asked to provide their recommendations about program design, which each utility did. No additional program activities took place between September and December 2011.

On October 13, 2011, the program was officially suspended all ME&O activities were put on hold. On May 10, 2012, the commission issued a guidance decision directing the utilities to discontinue the use of the Engage 360 brand and develop a strategy and budget for transitioning toward the use of Energy Upgrade California as a statewide umbrella brand for energy information and encouraging demand-side management actions by residential and small business consumers. Each utility was asked to file an individual application (A.12-08-007) no later than August 3, 2012 which will determine the objectives and program performance metrics of the program going forward for the 2013-2014 period. PG&E was named the lead utility for the SW ME&O program and was ordered to enter into a contract with CCSE by no later than July 1, 2012 to conduct the statewide implementation of the ME&O campaign to coordinate broader stakeholder input on and participation

in the statewide program beginning in 2013. A January 18, 2013 scoping memo and ruling of Assigned Commissioner and Administrative law judge the proceeding was divided into 2 phases. Phase 1 will approve the Flex Alert activities and budgets and a decision is expected April 2013. Phase 2 will approve all other activities and budget related to the SW ME&O program and a decision expected May or June 2013.

MEO-1
The launch of the Engage 360 brand was strategically designed for implementation in two distinct campaign phases: grassroots and mass media. However , the program was put on hold in September 2011 before it was completely launched. Commissioner Ferron's October 13, 2011 Assigned Commissioner's Ruling suspended the program through the end of 2011, pending further guidance. Therefore, the program did not have an opportunity to impact awareness and knowledge of key elements of the brand in 2011.

The program did not have an opportunity to impact awareness and knowledge for this PPM in 2012 since the program was put on hold October 13, 2011. On May 10, 2012, the Commission issued a guidance decision directing the utilities to discontinue the use of the Engage 360 brand and develop a strategy and budget for transitioning toward the use of Energy Upgrade California as a statewide umbrella brand for energy information and encouraging demand-side management actions by residential and small business consumers. Each utility was asked to file an individual application (A.12-08-007) no later than August 3, 2012 which will determine the objectives and program performance metrics of the program going forward. This proceeding is currently pending a decision which is expected in May or June 2013 and all work towards meeting the program performance metrics remains on hold until the decision is issued.

MEO-2
The program did not have an opportunity to impact awareness and knowledge for this PPM in 2012 since the program was put on hold October 13, 2011. On May 10, 2012, the Commission issued a guidance decision directing the utilities to discontinue the use of the Engage 360 brand and develop a strategy and budget for transitioning toward the use of Energy Upgrade California as a statewide umbrella brand for energy information and encouraging demand-side management actions by residential and small business consumers. Each utility was asked to file an individual application (A.12-08-007) no later than August 3, 2012 which will determine the objectives and program performance metrics of the program going forward. This proceeding is currently pending a decision which is expected in May or June 2013 and all work towards meeting the program performance metrics remains on hold until the decision is issued.

MEO-3
The program did not have an opportunity to collect self-reported energy efficient actions for this PPM in 2012 since the program was put on hold October 13, 2011. On May 10, 2012, the Commission issued a guidance decision directing the utilities to discontinue the use of the Engage 360 brand and develop a strategy and budget for transitioning toward the use of Energy Upgrade California as a statewide umbrella brand for energy information and encouraging demand-side management actions by residential and small business consumers. Each utility was asked to file an individual application (A.12-08-007) no later than August 3, 2012 which will determine the objectives and program performance metrics of the program going forward. This proceeding is

currently pending a decision which is expected in May/June and all work towards meeting the program performance metrics remains on hold until the decision is issued.

SDGE3154 SW - ME&OC Strategic Plan Narrative

The strategic plan is a non-resource initiative, based on collective input and ratepayer funding from California's IOUs. The goal of the ME&O strategic planning effort is to create a culture in California that practices EE and other demand side management options as a way of life resulting in both short-and long-term behavior changes. Because many consumers believe that they are already doing everything they can to save energy, a concerted effort must be made to convince them that they can, in fact, do more.

The Strategic Plan subprogram applied the results of the Brand Assessment, Brand Development, and the Marketing & Integrated Communications Plan; and furthermore, launched the new Web Portal.

An Assigned Commissioner Ruling Regarding the Statewide ME&O Program was issued October 13, 2011, which officially suspended all ME&O activities until Commission Staff could provide Commissioner Ferron recommendations on how to re-strategize the program. Parties were asked to provide their recommendations about program design, which each utility did. No additional program activities took place between September and December 2011.

On March 20, 2012 the Proposed Decision Providing Guidance on 2013-2014 Energy Efficiency Portfolios and 2012 Marketing, Education and Outreach directed utilities to abandon the Engage 360 brand and replace it with the Energy Upgrade California (EUC). No activities related to Engage 360 occurred in 2012 aside from sun setting the brand. Statewide ME&O activities are now revolving around maintaining the EUC brand and strategic planning activities intended to expand EUC to transition to a brand that encompasses all demand side management products and programs under California Center for Sustainable Energy implementation.

SDGE3155 SW-ETA - Assessments Narrative

The statewide Emerging Technologies Program (ETP) is designed to support increased energy efficiency (EE) market demand and technology supply (the term supply encompassing breadth, depth, and efficacy of product offerings) by contributing to development and deployment of new and under-utilized EE measures—including technologies, practices, and tools—and by facilitating their adoption as measures supporting California's aggressive energy and demand savings goals.

The Statewide ET Program has the following elements or sub-programs:

- Technology Assessments
- Demonstration Showcases
- Scaled Field Placements
- Market and Behavioral Studies
- Technology Development Support

- Technology Resource Incubation Outreach (TRIO)
- Technology Test Centers (TTCs) – SCE only

1) Number of technologies transferred:

Through the 2010-2012 program cycle a total of 16 technology assessments were transferred to EE Programs, resulting in the adoption of seven (7) rebate categories with a total of thirty-one (31) measures.

2) Number of projects completed:

Through the 2010-2012 program cycle, SDG&E ET Program completed 29 projects. A breakdown of these projects and technologies are as follows:

- Technology Assessments 16
- Scaled Field placements 2
- Demonstration Showcases 8
- Market and Behavior Studies 1
- Technology Development Support 2

A majority of the projects were focused on the latest lighting technologies. Market sectors addressed were restaurants, public garages, gift shops, gymnasiums, arenas, elevator cabs, parking structures, and cogeneration plants. Of the 29 projects, the majority may result measures adopted by energy efficiency (EE) programs in 2013 or beyond. The reports have all been transferred to EE Programs engineering staff for review, and most are available on the etcc-ca.com website.

SDG&E ETP focused primarily on lighting projects for the years 2010 and 2011 in order to be effective and maximize productivity. In 2012, there was still an ongoing effort to test advanced lighting technologies, but assessments beyond lighting were completed or began in 2012 including: VSD Multi-family pool pumps, adaptive refrigeration and freezer controls, and Automatic Sash Positioning Systems for laboratory fume hoods.

The persistent challenge of this program has been:

1. Finding early adopters to participate in the program
2. Due to the current economic climate, it has been difficult for potential customers to commit to testing and evaluation of new technologies. Although SDG&E ETP has reached out through the company's Account Executives, internal newsletters, and technology vendors' marketing effort, securing eligible sites for testing new technologies has been a continued challenge.
3. Getting contracts in place
4. Another significant challenge in implementing this program has been in getting contracts and agreements in place for the projects. On several occasions we have experienced long delays in getting through the contract language that both the utility's legal department and the customer's legal department can agree upon.
5. Changes in personnel, or changes in customers' decisions
6. Personnel changes in customer organizations can postpone or even eliminate projects. In the past there have been several instances when, due to personnel changes, the new decision maker has cancelled a project. This leads to a renewed effort in locating a new participant which can delay an assessment by as much as six months.

7. Limited personnel/resources
8. SDG&E ETP has found it difficult to simultaneously execute multiple projects, engage in industry efforts and collaborative organizations and manage other program administration with a limited staff of only one (1) project manager and a small budget of $1.35M annually. SDG&E has fortunately been held to reduced metrics in comparison to the larger IOUs who have more resources available; however, the reporting and administrative burden of the SDG&E ETP is similar if not identical to that of the other IOUs, and is not scaled to our resource levels, creating a large challenge for this program.

In late 2012 the Sempra Energy Utilities (Southern California Gas Company and SDG&E) decided to reorganize the management structure of the ETP. Prior to December 2012, One ETP Manager was responsible for both the SCG and SDG&E organizations. Currently the duties have been split and there are separate managers responsible for the SDG&E and SCG organizations, but the program staff at SDG&E has remained in place.

SDGE3156 SW-ResH - Prescriptive Whole House Retrofit Narrative

The Prescriptive Whole House Retrofit sub-program (PWHRP) is a new addition to the 2010-2012 residential energy efficiency portfolio of the four California investor owned utilities (IOUs) – Pacific Gas & Electric Company (PG&E), Southern California Edison (SCE), San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SCG or SoCalGas). In 2010, this program was launched in conjunction with the Whole House Performance Program. The whole house approach will be promoted through the statewide PWHRP in close coordination with the IOUs' local Comprehensive Home Performance Program (CHPP).

The program held participation workshops throughout SDG&E service territory to recruit additional contractors into the program and implemented a variety of marketing strategies (community events, door-to-door outreach, and web banners) to promote the program.
It also conducted a targeted marketing approach and hosted community events to gain lead generation. The program implemented a contractor mentoring component and expanded contractor training offerings to include webinars and workshops on topics of energy modeling and marketing. The program also partnered with AARA funded and Local Government Partnership funded programs. The program also implemented a Multifamily Whole Building Performance component and a Moderate Income Direct Install component.

Program barriers include:
1. Low customer participation.
2. Low "Basic Path" contractor participation

SDGE3157 SW-WE&TA - Strategic Planning & Implementation Narrative

The Statewide Investor Owned Utilities (IOUs) Workforce Education and Training (WE&T) Program represents a portfolio of education, training and workforce development planning and implementation funded by or coordinated with the IOUs: Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric (SDG&E), Southern California Edison (SCE), and Southern

California Gas Company (SCG). Following the adoption of the California Long-Term Energy Efficiency Strategic Plan, Decision (D.) 09-09-047 approving 2010-2012 Energy Efficiency Portfolios and Budgets subsequently codified the statewide WE&T program as being responsible for the development, planning, and implementation of three subprograms:

The **WE&T Centergies** Sub-program is generally organized around market sectors and cross-cutting segments to facilitate workforce education and training appropriate to achieve the energy savings, demand reduction, and related energy initiatives required of the IOUs. In 2012, Centergies became more focused on engaging with various stakeholders, including employers, unions, professional organizations, state agencies, non-profits, other training providers, and academic institutions to find common ground on training gaps, needs, and goals. Energy Centers represent the largest component of this sub-program. Included in this program are the Energy Center and Food Service Center activities.

In 2012, the IOUs focused on meeting quantitative targets provided in their respective Program Implementation Plans (PIPs) while shifting their priorities toward specific parts of the Needs Assessment and WE&T Process Evaluation, including sector strategy efforts and organizing courses into series. While objectives such as helping to improve the quality and qualifications of the green energy workforce, and increasing new pathways into energy efficiency careers have become additional aspirations, the IOUs remained committed to compliance and achieving the goals originally set for the 2010-2012 program period.

The **WE&T Connections** Sub-program is organized around downstream and upstream IOU relationships with the educational sector, entry and intro-level community-based training efforts that support workforce development in energy efficiency, energy management, and new emerging green careers.

In 2012, the IOUs continued progress in meeting the quantitative targets provided in their respective Program Implementation Plans (PIP) for the WE&T Connections subprogram. Additional quantitative information about IOU educational collaborations is also provided in the 2012 Program Performance Metrics Report, also submitted on June 1, 2013 and available on the CPUC's Energy Efficiency Groupware Application (EEGA) website[2].

The **WE&T Strategic Planning and Implementation** Sub-program involves management and execution of several strategic statewide planning tasks and resulting project implementation actions initiated by the Strategic Plan. In 2012, this subprogram was responsible for: a) facilitating IOU/CPUC WE&T Task Force Public Meetings; b) facilitating implementation of recommendations from the 2011 Needs Assessment Study; c) developing the 2013-2014 program implementation plans in response to Commission guidance.

Since receiving initial guidance to prioritize sector strategies in the Needs Assessment and subsequently in an October 2011 Advice Letter (SDG&E 2260-E-B/2041-G-B, SCG 4249-B, SCE 2588-E-B, and PG&E 3212-G-B/3852-E-B), the IOUs have taken significant steps forward towards establishing sector strategies for key market sectors in the IOUs' service territories.

[2] eega.cpuc.ca.gov

The overall approach has included developing cross-sector collaborations in key market sectors which will, over time: (1) create the workforce capable of market transformation, and (2) support Strategic Plan goals of establishing EE education at all levels of California's educational system and ensuring minority, low income and disadvantaged communities fully participate in EE industry training. Through each sector strategy, the IOUs assembled a varied group of stakeholders from state agencies, educational institutions, labor, private industry and community-based and non-profit organizations.

2012 was generally about supporting existing sector strategies, such as BOC and CALCTP, as well as setting the foundation for new strategies in priority areas. E.g., the following sector strategies were considered for development on a statewide level:

- Energy Workforce Sector Strategy (EWSS): Will focus on the professional Commercial EE workforce. HVAC Sector Strategy: Will focus on Commercial QM and advanced economizer technologies. The HVAC sector strategy launched in Q4 of 2012.
- K-Post-secondary Energy Education Sector Strategy (EESS): Will focus on education collaborations and supporting the dual goals of IDSM and career awareness integration as well as increased support for ROP and CPA programs. The EESS launched in Q3 of 2012.
- Automation Academy: Will focus on trainings which result in increased proficiency in operating program logic controllers.
- Architecture Sector Strategy: Will focus around multi-level architecture and integrated design curriculum that responds to Strategic Plan and Needs Assessment priorities. Renewables Sector Strategy: Will focus on more fully connecting and integrating stakeholders in the photovoltaic industry training-employment chain.

The groundwork set in 2012 provided a strong foundation for continued strategic planning and implementation in 2013. However, as mentioned above, 2012 was also about supporting existing sector strategies. As such, all IOUs continued to offer - directly and through partnerships - CALCTP and BOC training.

A statewide and detailed report of results for each IOU during 2012, including metrics, is also posted on the EEGA website.

SDGE3158 SW-WE&TB - WE&T Centers – SDERC, Food Service Center Narrative

The Statewide IOU Workforce Education and Training (WE&T) Program represents a portfolio of education, training and workforce development planning and implementation funded by or coordinated with the IOUs. Education and training is a vital component to each of the IOU energy efficiency portfolio filings for 2010-2012 and integral in supporting achievement of IOU energy savings targets and the workforce objectives set forth in the California Long-Term Energy Efficiency Strategic Plan, and 2011 WE&T Needs Assessment. Workforce Education & Training has become an important crosscutting activity for the IOUs in an effort to not only educate and train current workers, but to prepare future workers to be able to successfully perform the jobs needed to help achieve increased energy savings targets for the IOUs and California's clean energy goals. This effort will require concerted planning among secondary and post-secondary educational leaders,

technical and professional organizations, state agencies, economic and labor development organizations, utilities, construction and manufacturing businesses that deliver energy management and efficiency solutions.

SDG&E and California Center for Sustainable Energy (CCSE) continued to work in partnership throughout the program period of 2010-2012. The Workforce Education & Training Program serves both the residential and non-residential sectors. It offers educational and technical seminars, library resources including a tool lending library, consultations and other events.

This program provided customers the availability to increase their awareness and knowledge in energy efficiency, integrated demand-side management (IDSM), sustainability and emerging technologies.

Focusing on the goal of providing industry recognized certification programs to enhance workforce job skills and/or advance careers, WE&T held 14 certification offerings in 2012. The certification programs listed in the table below were held in collaboration with US Green Building Council San Diego Chapter (USGBC), Institute of Heating and Air Conditioning Industries (IHACI), Northwest Energy Efficiency Council (NEEC), California Advanced Lighting Controls Training Program (CALCTP), Illuminating Engineers Society (IES), San Diego State University (SDSU), UC San Diego (UCSD), and Energy Efficiency Funding Group (EEFG).

2012 SDG&E WE&T Certification Programs	
Certification Name	# of Times Certification Series was Offered
Building Operator Certificate Level I Series (NEEC)	1
Building Operator Certificate Level II Series (NEEC)	1
California Advanced Lighting Controls Training Program (CALCTP) Technical Series	1
CALCTP Systems Course **NEW*	1
CALCTP Business Development Series **NEW*	1
Efficiency Sale Professional **NEW* (EEFG)	1
Illuminating Engineers Society (IES) - Lighting Certification **NEW*	1
LEED Existing Building & Operations (EBOM) Exam Prep (USGBC)	1
LEED Green Associate Exam Prep (USGBC)	1
LEED Neighborhood Development (ND) **NEW* (USGBC)	1
North American Technicians of Excellence (NATE) Series (IHACI)	1
SDSU Benchmarking Certification **NEW*	1
UCSD Sustainable Business Certification Series	2
TOTAL Certification Series Offered	**14**

As CCSE and SDG&E began meeting to end the SDERC program, both organizations worked well to separate assets, manage budgets, while simultaneously meeting 2010-2012 program cycle goals. SDG&E and CCSE were able to successfully transition some of the operations from one facility to

the other. This process was transparent to our customers. CCSE worked with SDG&E to effectively implement a broad range of energy efficiency and green building topics. Both organizations continued to coordinate workshop offerings held at both the SDERC and Energy Innovation Center (EIC) in accordance with the SDG&E's Statewide Workforce Education and Training Program in 2012.

CCSE & SDG&E continued to work well together to publish our joint quarterly calendar. In an effort to go green, in 2013, the quarterly calendar will not be physically mailed and will only be distributed electronically. CCSE agrees that electronically distributing the calendar is the better and more sustainable path. Both organizations also continued to cross promote marketing efforts through each company's website.

One of the goals stated in the California Long-Term Energy Efficiency Strategic Plan and 2011 WE&T Needs Assessment is to achieve the fullest participation by minority, low income and disadvantaged communities in training and education at all levels of IDSM and the energy/resource efficiency industry. Since relationships with organizations serving "hard-to-reach" communities had yet to be established, this proved to be a challenging goal to accomplish in 2012.

To overcome this barrier, WE&T offered a new program opportunity called A Green Future. A Green Future was created in response to the October 2011 Advice Letter, which established new goals for WE&T to test before the 2013-2014 transition period. A Green Future targeted the following Advice Letter goals:

- Collaborate with Construction Trades
- Collaborate with Educational Institutions
- Include the Disadvantaged Workforce
- Enhance curriculum, increase hands-on trainings, increase certifications

A Green Future "Call for Projects" was sent to 132 individuals active in the San Diego region representing:

- K-12 schools
- Community Colleges
- Universities
- Construction Trade Schools
- Community Based Organizations
- For-profit companies with EE technical training expertise.

In the "Call for Projects", organizations were asked to submit projects for funding consideration that:

1) Enhance/develop energy efficiency and sustainable building job skills training that meets current industry demand
2) Improve outreach of and promote participation in training programs, especially for the hard-to-reach worker
3) Provide "green" career exploration opportunities to K-12 students.

Responding organizations were given 3 weeks to submit a proposal with a $30,000 cap. A total of 60 responses were received, representing $1.8M in requested funding. SDG&E awarded 26 proposals, representing $506,000 in funding. Funding was administered in coordination between WE&T and

EE Partnerships programs. Funding went to:

- 7 Community Based Organization (CBO) projects
- 4 K-12 school projects
- 4 Community College projects
- 4 University projects
- 4 For-profit projects
- 2 Trade schools projects

Of the 26 awarded projects, 7 (representing approximately $115,700) specifically served the hard-to-reach workforce. For example, Able-Disabled Advocacy, a CBO, trained at-risk high school students in energy efficiency and weatherization work skills, which were then applied in energy efficiency projects at low-income homes. Many of the homes were owned by disabled residents. All projects were completed in December 2012. The success of A Green Future, and WE&T's ability to continue it will be evaluated in 2013.

CCSE's SDERC implementation barriers included: In 2011, the EIC opened and SDERC's workshop attendance saw a significant decline. Since some workshops were still programmed at CCSE, and some at the EIC, a few workshop attendees were confused of their workshop location. By and large, this was not a problem for attendees that checked the online calendar, or read their reminder email notices.

The variety of workshop topics centered on energy efficiency offered at SDERC grew redundant to many workshop attendees that have been attending workshops at CCSE for a couple years. Partnering with AIA San Diego to provide Continuing Education Units (CEUs) introduced some new topics but also attracted a new crowd. With the emergence of Energy Upgrade California, many long-time attendees began attending Energy Upgrade California workshops to receive more focused workforce training.

As mentioned above, SDG&E began to partner with AIA San Diego and USGBC to provide attendees with continuing education units to satisfy their respective credential maintenance plans. The WE&T program also offered continuing education units through CSU San Marcos as well as NATE.

Outreach capabilities were also expanded to co-market EIC/SDERC energy efficiency workshops with Energy Upgrade California. This was a very effective way of leveraging the Energy Upgrade California Roadshow and getting those guests information about SDERC and EIC workshops.

All of the 2012 WE&T program metrics were met and exceeded. The breakdown of trainings, consultations, outreach events, and lending of tools is listed below.

2012 WE&T Program Metrics				
Category	**Target**	**SDERC**	**EIC**	**Total**
Energy Center Visitors	n/a	5,144	24,486	29,630
Training Sessions	120	43	209	252
Consultations	100	100	75	175
Outreach Events	50	223	457	680
Lending Library Tools Checked Out	20	1705	n/a*	1705
Reference Library Books Checked Out	n/a	2040	n/a*	2040

*The SDERC operated the resource and tool lending library on behalf of the SDG&E WE&T program.

Training Sessions Tracking

Training session attendees are required to register online and/or sign-in when they arrive at the workshop. SDG&E's database keeps track of all attendee names and contact information. The number of workshops held, number of attendees, and workshop-specific information (i.e., whether it is IDSM) are also tracked. At the end of all seminars, each attendee is given an evaluation. The evaluations help track the quality of trainings offered. This information is tracked in a separate system.

Library

Customers borrowing a tool or book initially complete a Borrowing Agreement Form with their personal information and a copy of their driver's license on file. After this initial agreement, all circulation of books, DVDs and tools are tracked through a software program called EOS.

Technical Assistance

All customers who access technical assistance are required to provide their name, address and telephone or e-mail which are tracked on an MS Excel spreadsheet.

SDGE3159 SW-WE&TC - WE&T Connections – PEAK and Green Campus Program Narratives

A. PEAK PROGRAM NARRATIVE

PEAK Student Energy Actions is a comprehensive standards-based physical science education program that empowers students in grades three through seven to effectively manage their energy future. The program promotes energy efficiency, demand response, renewable resources, environmental stewardship and careers in sustainable energy management. The foundational concept behind PEAK is that in order to truly empower students to manage energy use, they must understand the entire energy equation from the science of how energy is created to the environmental impact of generating electricity and the financial impact of energy bills on their families. Students learn to value energy and to promote sustainable energy use in their homes, schools, and communities through the use of four PEAK Student Energy Actions:

1. Shifting Energy Use Off Peak Hours
2. Shrinking Energy Use through Conservation
3. Plugging in to New and Efficient Technologies

4. Exploring Renewable Energy

PARTNERSHIP INITIATIVE
Throughout 2012, PEAK San Diego successfully partnered with both local government partnerships and prominent state and local organizations to provide energy education to existing PEAK and new non-PEAK students.
PEAK partnered with California EPA to support California's effort to advance environmental education. This monumental partnership allows teachers to learn how the PEAK program fits into California's Environmental Education Initiative (EEI) during teacher trainings.

CURRICULUM DEVELOPMENT
PEAK enhanced multiple components of the curriculum in preparation for the PEAK Teacher Guidebook, Fifth Edition in order to increase user friendliness and relevancy such as including green career and STEM (Science Technology Engineering and Mathematics) connections as well as a new unit about the water-energy nexus.

WEBSITE (www.peakstudents.org)
The website serves as a tool to cross-promote utility, community and government partners. PEAK launched new website modules to improve implementation with new features.

RECRUITMENT
PEAK and Capistrano Unified School District coordinated and facilitated a district-wide PEAK Teacher Orientation and Training, which included a tour of The Ecology Center in San Juan Capistrano.

Teachers who did not re-enroll in the PEAK program identified the following reasons:

- Retirement
- Layoffs due to state budget cuts in education
- Changes to grade level or subject area teaching assignments

Measurable Program Objectives
During the 2012 calendar year, PEAK enrolled 1,149 students from 15 school districts into the program. By the end of 2012, PEAK surpassed the program cycle student goal of 9,000 by enrolling an additional 1,009 students. Overall, PEAK served 84 schools, of which 53% are classified as Free and Reduced Price Meals schools.

In addition, PEAK educated 3,822 non-PEAK students through educational assemblies and community partnerships. Through PEAK's Community Partners Initiative, PEAK San Diego actively engaged in four community partnerships to promote energy efficiency concepts into the community.

In 2012, our community partners included: Carlsbad Flower Fields, County Office of San Diego: Department of Parks and Recreation, City of Chula Vista, California Center for Sustainability, Environmental Education Initiative through the CA Environmental Protection Agency, Science @ OC/National Science Network (Orange County), San Diego Science Alliance, and Balboa Park Cultural Partnership

Through PEAK's participation at the High Tech Fair (San Diego Science Alliance), PEAK educated 2,500 non-PEAK students on green careers and energy efficiency. In 2012 at Carlsbad Flower Fields, PEAK San Diego provided energy education to approximately 400 non- PEAK students via a short interactive energy efficiency hands-on exhibit about energy efficiency.

PEAK San Diego facilitated 5 PEAK TOTs which welcomed 51 trained teachers in the SDG&E territory. Upon request, PEAK staff provided on-site support to PEAK schools, completing 12 assemblies and 31 site visits including but not limited to planning meetings, lesson co-facilitation and participation in school science events.

PEAK Students and Events (2012 Only)	**Total Number**
Students [PEAK] Reached Through Events	2895
Students [Non-PEAK] Reached Through Events	3822
WE&T Events Promoting Green Careers/Energy Conservation	21
Site Visits	31

B. POWERSAVE GREEN CAMPUS PROGRAM NARRATIVE

The Alliance to Save Energy's PowerSave Green Campus Program strives to increase awareness about the importance of energy efficiency; promote careers in the field; generate actual savings; and contribute to academic infusion of energy efficiency concepts. The program trains students and engages staff and faculty members, encouraging diverse groups to work together to achieve their campus energy efficiency and sustainability goals. Furthermore, PowerSave Green Campus is vital to meeting the State's energy efficiency and workforce education goals.
State-wide program goals are to:

- Infuse energy and energy efficiency concepts into academic curricula
- Build pathways to green careers
- Promote energy efficiency outreach through educational campaigns
- Realize measurable energy savings

The PowerSave Green Campus Program is implemented by the Alliance to Save Energy and its subcontractor (Alliance PoweSave Green Campus Staff), and over 75 paid student interns (PowerSave Green Campus Interns). The Alliance to Save Energy operates on two campuses in the SDG&E territory: UC San Diego, and San Diego State University.

2012 Program Highlights:

- The 2012 Green Campus Energy Efficiency Summit which brought together over 170 program stakeholders and interns statewide, focusing on energy efficiency-related trainings, facilitated project planning and best practice sharing with faculty, staff and administrators from their campus stakeholder groups.
- UC San Diego's Green Campus team's research and analysis led to retrofits of 229 fume hoods in Pacific Hall Laboratory with variable air volume hoods.
- UC San Diego interns found ways to incorporate demand response concepts into their existing projects and outreach events. In addition to promoting cold water clothes washing,

the team prepared talking points to educate students about the energy benefits associated with washing loads during off-peak hours.

- Nearly 70 interns and Alliance staff members convened at UC Davis for the 2012 Green Campus End-of-Year Meeting and California Higher Education Sustainability Conference for training, inter-campus networking, and sharing best practice projects. As part of the larger conference, PowerSave Green Campus swept the Best Practices in Student Energy Efficiency awards for the eighth year in a row.
- The 2012 Campus Conservation Nationals (CCN) concluded on April 23, drawing national media attention to the Alliance to Save Energy's PowerSave Green Campus Program through an article on www.ase.org and a CCN webinar highlighting best practices by Green Campus "League" winners.

Workforce Education and Training & Academic Infusion:

- Interns at UC San Diego gave a green careers presentation to 35 students from San Diego's Palomar City College. The student-led training was one of the sustainably themed events scheduled during Palomar's visit to UC San Diego's campus. Outreach to community colleges is in direct response to feedback from the utilities.
- Interns at UC San Diego offered a LEED Green Associate (GA) test preparation course to 30 students on campus, free of charge. Building off this success, the team applied for and received a $7,000 grant from SDG&E to provide this training for people from low-income communities. This training was ultimately given to 31 students and community members.
- San Diego State interns organized a fast paced networking event that allowed students to speak with local green professionals in a "speed dating" style environment. The 39 students and 19 professional attendees offered overwhelmingly positive feedback.
- Interns from San Diego State trained seven students in their campus Math Engineering Science Achievement (MESA) program on how to teach others about energy and energy efficiency. In the spring of 2013, these trained students will educate 1,000 San Diego area high school students on the same topics. This train-the-trainer approach is being piloted so that the program can reach more K-12 students.

Outreach:

- UC San Diego interns tabled at three residence hall complexes in order to spread the word about Campus Conservation Nationals. Over the course of the competition, the team spoke with more than 500 students and collected over 300 signatures from students pledging to reduce their energy usage.

Energy Savings:

- PowerSave Green Campus interns at UC San Diego received a grant to retrofit the commercial kitchen in Che Café, an on campus restaurant and music hall.
- Interns at San Diego State facilitated collaborations between their utility and campus administration to fund a parking lot lighting retrofit with new T8 LED lamps.

Met all program deliverables listed below:

- Average cost savings (actual and potential) through program activities during the period of January – September 2012

- Paid interns working at each campus per school semester/school quarter
- Average number of interns and other students per school quarter/semester engaged in program educational activities, including training, mentoring, and promoting future energy efficiency professionals, per semester/school quarter
- Distribute feedback surveys to all paid and school credit interns and program "stakeholders"- administrators, facilities, staff, faculty, etc.
- Work with at least 1 faculty member on each campus to devise ways to infuse energy efficiency into curriculum
- Convene faculty members from each campus (per above deliverable) to focus specifically on integrating energy efficiency into academic courses and to share thinking across campuses
- Design and implement student-led campaigns that produce measurable awareness and attitude changes towards energy efficiency and the environment, and obtain energy savings through promotion of available energy efficiency and demand response programs for homes.
- Promote energy efficiency careers
- Survey once per year facilities operators/stakeholders to determine satisfaction level with program, particularly intern assistance with energy efficiency projects and awareness outreach campaigns

SDGE3160 SW-NCResA - RNC Narrative

The California Advanced Homes Program (CAHP) provides incentives to homebuilders for beating the current California Energy Standards by at least 15%. CAHP participants include single-family custom homes, duplexes, condos, apartments, and residential portions of mixed-use developments.

2012 was another successful year for CAHP, beating energy savings goals and unit participation targets. The residential new construction market continues to struggle to recover from the worst downturn since the depression. Despite this backdrop, CAHP encouraged increased participation, working hard to improve market penetration while building is still in a lull.

The residential new construction market continues to experience difficulty due to the economic environment. However, record low interest rates appear to be slowly bringing the market back. Funding instability from the New Solar Homes Partnership (NSHP) also caused mild hang-ups for CAHP. Because CAHP pays bonus incentives tied to NSHP participation, several builders voiced concern related to the dependability of CAHP funds and expectations surrounding payment processing.

SDGE3161 3P-NRes01 - Non-Res HVAC Tune-up/Quality Installation Narrative

The Non-Residential HVAC Tune-up/Quality Installation program is third party program designed to stimulate the supply and sales of premium-efficiency Heating, Ventilation and Air Conditioning (HVAC) systems and to provide energy-efficiency tune-up services to commercial customers. It provides incentives to participating contractors and equipment specifier/end-users who install qualifying air conditioning systems or controllers in commercial replacement and new construction applications, or who participate in program tune-up services. The program includes six

subprograms, each addressing market and sector-specific components of HVAC performance. These include statewide Quality Maintenance and Upstream incentives for high-efficiency equipment stocking and sales, Quality Installation incentives, and Local-Area activities including tune-up services, controllers for hotel guest room units, and customer or contractor incentives for installing high-efficiency HVAC equipment (replacement or early retirement).

The program implementer participated in numerous stakeholder meetings aimed at developing practical implementation steps for integrating ANSI/ASHRAE/ACCA Standard 180-2008 into the 2010-12 programs. As a result, the program provides comprehensive and cost-effective maintenance services that engage contractors and incorporate industry standards for inspection and maintenance tasks. The program successfully integrated a highly cost-effective one-stop tune-up service with the statewide Quality Maintenance offering, a maintenance-agreement driven subprogram that includes regularly scheduled maintenance activities and customer incentives paid over three years. Program successes include (a) improving comprehensiveness and maintenance service delivery, providing contractors with maintenance options that fit their business models, (c) achieving excellent customer satisfaction ratings and (d) exceeding energy savings (kWh) and demand reduction (kW) goals. Participating contractors enthusiastically marketed the program to small and medium sized businesses, and the program was well-received by customers. Customer surveys indicated improved awareness of the program and satisfaction with program tools and information.

Other program features that worked well are the web-based enrollment system and hotel guest room controllers that reduce AC use when rooms are unoccupied. Web-based enrollment enabled contractors to ascertain eligibility prior to scheduling work. Customers provided confirmation of program participation through this process as well, increasing and documenting customer awareness of the program. Data collected during enrollment is entered in the tracking database and used to track and manage work in progress, providing the program with more detailed information on sites in the queue. Guest room controllers were popular installations at the end of 2012 when additional funds became available.

Although participation in local-area activities has been strong, the statewide components of the program have met with lukewarm response. Eleven contractors have completed QM classroom and rooftop training since September 2011 when the Statewide QM program was introduced, but only two have successfully sold the required three-year maintenance contracts to their customers, and none had completed maintenance activities by the end of 2012. The implementation barriers encountered in the QM Program include (a) information asymmetry, (b) cost and risks borne by participating contractors, and (c) industry resistance to mid-cycle program change. Contractors require additional customer education support to market the value of ongoing maintenance, easing the information asymmetries in the market. Costs and risks borne by contractors include additional data collection and data entry costs and uncertainties about their exposure over the three-year payment program. (If customers do not authorize repairs needed to maintain units over this period, incentives are not paid.)

Similar barriers were encountered with the Quality Installation (QI) Program. Upstream participation was also low this year, due primarily to policies instituted to increase customer awareness and reduce free ridership.

Other problems encountered involved the Maintenance Planning System, a statewide database for QM tracking and reporting. These included the omission of data fields for contractors to provide refrigerant test data for multi-circuit units, disabled contractor reports and notices for outstanding tasks, and contractor difficulty with rooftop data collection. Contractors found the 56-page (per HVAC unit) field form unwieldy, and online data entry required navigating countless screens.

Quality Installation training and recruitment activities commenced in March 2012 and included interviews, contractor surveys, a training workshop, and the availability of training cost reimbursement for ACCA Quality Assured certification, EPA Energy Star Service Provider certification, and/or NATE certification.

The third party implementer created a single-page online form intended for back-office use for those contractors who preferred to use a paper form in the field. The modified paper form (six pages per HVAC unit) offers technicians a more manageable data collection tool, and may be completed by technicians in the field or on laptops or tablets without an internet connection.

SDGE3162 3P-NRes02 - SaveGas – Hot Water Control Narrative

The SaveGas Domestic Hot Water Control Program is a third party resource program. It is designed to install a “Monitored” Domestic Hot Water Control technology on Hotel/Motel, Senior Care and Kitchen/Laundry facilities providing ongoing monthly therm savings. In addition to providing monthly savings, a third party implementer monitors the end users boiler environment on a daily or hourly basis to assure that the initial savings we achieve are sustained and optimized. When operational boiler issues are identified, an e-mail is dispatched to the facility for resolution.

Success in this program has largely been attributed to the top down selling approach. The implementer works closely with the facility owner to establish value and elevate the technology from a simple savings technology to an integral component within the facilities infrastructure management. SaveGas is most successful when a test is implemented and savings are proven to the client before signing of contract. SaveGas has been very successful showing savings with immediate return to the client. In doing tests customized to each application, SaveGas can give the client the best scenario for their application.

Establishing the desired rapport with facility owners and completing the required activities for the program, such as "benchmarking", required by the CPUC, created problems for the program. Even with increased to improve marketing through combining the administrative and marketing team efforts, the program struggled to get the program acceptance with facility owners.

Due to the sluggish economy and the extremely low cost of gas, facility owners are hesitant to do anything that might yield a customer complaint, even though saving would be achieved. Therefore, the program did not meet its 2012 savings goal objectives and was not continued into the 2013-2014 transition period.

SDGE3163 3P-NRes03 - Business Energy Assessment (BEA) Narrative

The Business Energy Assessment (BEA) Program is a third party non-resource program that provides small and medium commercial & industrial (C&I) customers with an on-line assessment/audit solution delivered through SDG&E's website. In approximately 10 minutes, the customer is provided with a customized plan consisting of practical steps to reduce their energy use and costs including:

- A prioritized action plan for reducing their energy costs
- Links to SDG&E rebates and services for energy savings
- Benchmarking of the business' energy management practices

The program incorporates a range of marketing activities to engage businesses in the program including over-the-phone and direct-mail marketing. The on-line assessment is customized for SDG&E's service territory and rebates.

The key to the success of the program has been the short amount of time to complete the assessment and the multi-pronged marketing utilized in the program. The short completion time means that over 80% of businesses starting the assessment complete it and receive a report. The multi-pronged marketing utilized in the program has resulted in the program significantly exceeding goal.

The program exceeded the goals for the program in 2012. The key to the success of the program continues to be the short amount of time to complete the assessment and the multi-pronged marketing utilized in the program. The short completion time means that over 80% of businesses starting the assessment complete it and receive a report. Although the program was successful, the program was not continued into the 2013-2014 transition period because of the plans to implement a statewide integrated audit tool starting in 2013.

SDGE3164 3P-NRes06 - Energy Efficient Water Pumping Narrative

The Optimizing Pump Utilization Systems (OPUS) Program, is a third party program that addresses municipal, agricultural, commercial, and industrial pumping systems. The program performs pump tests, pumping system analysis and provides an Operational Pumping Efficiency Report and Energy Cost Savings Analysis. The program refers customers to SDG&E's core Energy Efficiency Business Incentives (EEBI) Program to take advantage of incentives to assist with the cost for pumps that are repaired or replaced in order to improve energy efficiency and lower energy costs.

The Pump Testing Services, including the information about the customers' pumping systems were well received by the SDG&E customers and were successful in establishing a relationship with the pumping sectors by making them aware of the need for preemptive energy efficiency routine. The pump test data, the efficiency report and energy cost savings analysis information has helped customers to identify pumps that are cost effective to repair or replace.

OPUS has successfully established itself in the pumping community and created recognition of program benefits. Many within this segment have utilized the pump efficiency programs, the data and the services offered by the program.

The OPUS Program met the goal for pump tests and helped a number of customers to submit projects to the core EEBI Program. Also, the training and educational outreach program goals were achieved. Both of the pump efficiency trainings were coordinated with SDG&E's Energy Innovation Center and had approximately 80 people at each of the events. The program stayed within budget but utilized all the allotted funds.

SDGE3165 3P-NRes07 - Healthcare Energy Efficiency Program Narrative

The Healthcare Energy Efficiency Program (HEEP) is a targeted third party program that supports energy efficiency in healthcare facilities within the service territory. Through HEEP, customers are offered comprehensive project identification support—often initiated through an energy efficiency audit. Customers also receive implementation support, including help selecting a vendor or contractor as well as assistance with obtaining the associated utility rebate or incentive from SDG&E.

Four key activities continued to contribute to the success in obtaining valuable leads and actionable projects, resulting in strong energy savings opportunities in 2011 and a foundation for additional future savings.

The first key component relates to repeat business opportunities. The second component embodies the collaborative partnership that HEEP staff has developed with SDG&E personnel. The third component involves educating and engaging contractors and vendors about the benefits that HEEP offers including engineering analysis, rebate and incentive application support for the customer, and creating a value proposition based on energy savings. The fourth component which was instrumental in bringing everything together entailed preparing, supporting, and/or submitting Energy Efficiency Business Incentive (EEBI), Energy Efficiency Business Rebate (EEBR), Premium Efficiency Cooling Program (PECP), Energy Savings Bid (ESB), and On Bill Financing (OBF) applications for energy-saving opportunities.

In 2012, there were 233 projects completed, which resulted in annual energy savings successfully fed into core programs, which exceeded goals except for the kW reduction. Also, the ENERGY STAR Benchmarking survey was completed for all facilities participating in the program.

The program's success in getting customers to participate in the program resulted in a fund shift of $300,000 to meet the additional demand.

SDGE3166 3P-NRes08 - Lodging Energy Efficiency Program Narrative

The Lodging Energy Efficiency Program (LEEP) is a targeted third party non-resource program that supports energy efficiency in lodging facilities within the San Diego Gas & Electric (SDG&E) service territory. Through LEEP, customers are offered comprehensive project identification and analysis support—often initiated through an energy efficiency audit. Customers may also receive implementation support, which includes selecting a vendor or contractor as well as assistance with obtaining the associated utility rebate or incentive from SDG&E.

Four key activities continued to contribute to the success in obtaining valuable leads and actionable projects, resulting in strong energy savings opportunities in 2011 and a foundation for additional future savings.

The first key component relates to repeat business opportunities. The second component embodies the collaborative partnership that LEEP staff has developed with SDG&E personnel. The third component involves educating and engaging contractors and vendors about the benefits that LEEP offers including engineering analysis, rebate and incentive application support for the customer, and creating a value proposition based on energy savings. The fourth component which was instrumental in bringing everything together entailed preparing, supporting, and/or submitting Energy Efficiency Business Incentive (EEBI), Energy Efficiency Business Rebate (EEBR), Premium Efficiency Cooling Program (PECP), Energy Savings Bid (ESB), and On Bill Financing (OBF) applications for energy-saving opportunities.

In 2012, there were 271 projects completed resulting in energy savings fed into the core commercial programs that exceeded the energy saving goals for kWhs and Therms but was below kW goal. Also, the ENERGY STAR Benchmarking survey was completed for all facilities participating in the program.

The program's success in getting customers to participate in the program resulted in a fund shift of $500,000 in 2012 to meet the additional demand.

SDGE3167 3P-NRes09 - Mobile Energy Clinic Narrative

The Mobile Energy Clinic (MEC) focuses on improving energy efficiency for small nonresidential customers by providing diagnostics and maintenance of HVAC equipment and small boiler tube cleaning; implementing no-cost/low-cost measures to improve energy efficiency; and by providing recommendations through energy audits.

MEC operated successfully as a direct install program during 2010 and was subsequently chosen as one of three vendors to implement the Statewide Direct Install (DI) Program through a competitive bid process conducted in 2010, SDGE3167 was subsumed into the SDGE3174 SW DI Program, beginning January 4, 2011. This program stopped marketing as MEC and in 2012 operated successfully under the program name MEC Plus as part of the SW DI Program. Under MEC Plus the program offers additional measures to align with the SW DI Program.

SDGE3168 3P-NRes11 - Portfolio of the Future Narrative

Portfolio of the Future ("PoF") is designed to leverage and enhance SDG&E's ET efforts by identifying and accelerating the market adoption of emerging technologies that can significantly improve end-use electricity efficiency in SDG&E's service territory. The PoF work will accomplish this by:

- Helping to validate emerging technologies, demonstrate the benefits, build the necessary market infrastructure, and promote and encourage early adoption by concurrently providing assistance, defining the value proposition, and addressing market barriers.
- Building awareness regarding the benefits from the emerging technologies and setting the stage for including some of the emerging technologies in the next cycle (2012 – 2014) of energy efficiency programs.
- Proactively identifying promising opportunities that can reduce reliance on volatile energy supplies.

Leveraging the joint resources and assets of SDG&E; other utilities, including SCE and PG&E; Navigant Consulting, Inc. (NCI); potential Research and Development (R&D) partners, including the DOE, California Energy Commission's Public Interest Energy Research Program (PIER), New York State Energy Research and Development Authority (NYSERDA), private equity, and venture capital funds; the utilities' customers; other state and Federal agencies; and, local governments.

The primary indicator PoF program success is the number of new technologies that are brought to SDG&E's energy efficiency portfolio and their estimated incremental savings potential.

In agreement with SDG&E the budget for the program was allowed to be spent by July 2011, and it was agreed that all information from the program would be provided to SDG&E as the end of June 2011. In 2012, the program, effectively, was inactive since no additional funds become available for the program. The program was not continued in the 2013-2014 transition period.

SDGE3169 3P-NRes12 - Comprehensive Industrial Energy Efficiency Narrative

The Comprehensive Industrial Energy Efficiency Program (CIEEP) develops and implements industrial energy efficiency projects with a focus on both demand reduction and energy efficiency. Incentives are offered through SDG&E core incentive programs.
Customer facility audits are provided under the program and offer customers a comprehensive list of measures, savings, and incentive amounts. Upon customer indication of project priorities, the program works with the customer to file applications for incentives and implementation of the project(s). This comprehensive program targets all available energy efficiency technologies.

The program has had significant success in working with the SDG&E Account Representatives in identifying customers with potential for significant energy reductions. The Account Representatives are very knowledgeable regarding their assigned customers and have been very successful in introducing the CIEEP Program Contractor to these customers. This is evident by the over achievement of the number of Customer Facility Audits (CFA) completed. In addition, the savings identified during the CFAs are in excess of the 2012 goals.

It was anticipated that there would be a significant time lag between identifying potential energy efficiency measures and customer implementation of the measures. The downturn in the economy has continued to have a serious impact on customers' ability to implement identified projects. Another significant factor contributing to a reduction in realized savings has been attributable to the delays associated with the CPUC's Energy Division review of projects.

The 2012 CIEEP Program goals are to identify savings and actual installations based on the number of audits as means of tracking program achievements. Actual energy and demand savings are achieved using core programs including the Energy Savings Bid program, the Energy Efficiency Business Incentive program and the Energy Efficiency Business Rebate program.

SDGE3170 3P-NRes13 - Retro Commissioning Narrative

The Retrocommissioning (RCx) program provides services and incentives to support retrocommissioning of commercial buildings larger than 100,000 square feet in the SDG&E territory. The program recruits potential candidates, screens and benchmarks buildings to determine eligibility, qualifies retrocommissioning providers, and provides oversight of the retrocommissioning process including the provider's investigation. Following investigation, the program helps customers select measures for implementation then provides support throughout the implementation process to maximize energy savings. When implementation is completed, the RCx provider conducts verification of the measures and provides training to the building operators to maintain the measures and associated energy savings over time; all deliverables are reviewed and accepted by the Program prior to submission to SDG&E for final approval. Finally, the RCx program installs performance tracking equipment as an offering to select projects to provide ongoing monitoring and verification of energy savings.

The Program found great success in reaching out through established relationships, such as retrocommissioning providers and trade associations, and by marketing the Program to building engineers resulting in a fully subscribed Program in 2010; in 2011 and 2012 these relationship continued to lead to interest in the Program.

The Program's Investigation and Implementation Guidelines and retrocommissioning provider involvement have been keys to Program success. The Program has created clear guidelines for retrocommissioning providers and provided training to all active providers. In addition, the Program includes retrocommissioning providers at an earlier stage in the process to allow input on potential project energy savings. The guidelines and solid communications with our providers resulted in the production of high-quality project deliverables with implemented savings in 2012. PECI has managed adaptively, addressing challenges and opportunities as they arose, learning from past experience and consistently improving Program delivery.

In 2012 PECI placed a strong emphasis on effectively driving implementation forward in order to claim savings on projects prior to the end of the cycle in December. By maintaining close contact with customers and providers throughout the implementation and verification process, between August and December ten projects completed implementation. Verification deliverables were submitted to SDG&E for these projects by December 20, 2012.

The energy savings goals were increased with the additional funding in Q1 of 2012. In 2012, the Program achieved installed savings representing 82% of the 2010-2012 Program cycle kWh goal. The KW installed represents 90% of the Program cycle goal, and the therms installed represents 77% of the Program cycle goal. Ultimately, the Program achieved 94% of the kWh, 166% of the kW and 112% of the therm Program energy savings goals.

SDGE3171 3P-Res01 - Res HVAC Tune-up/Quality Installation Narrative

AC TIMe is a third party program that targets SDG&E residential customers with air-cooled, refrigerant-based direct expansion air conditioning improvements. The objective of the program is to improve the performance of existing HVAC systems for participating SDG&E customers through the use of advanced diagnostic techniques, the replacement of existing inefficient air conditioners with new high efficiency units, adherence to quality installation procedures, and quality of service training designed to provide HVAC contractors with skills that enable them to move energy efficient products and services through the market place.

Starting in the fall of 2011, the AC TIMe program was closed and transitioned into the AC Quality Care Program. The new program (AC Quality Care) worked with PG&E to create a new residential Quality Maintenance program with a more comprehensive service offering to customers. AC Quality Care also includes an ENERGY STAR Quality Installation program that is based on the SCE Quality Installation program structure.

AC TIMe created a large customer demand for the no-cost RCA and DTS measures in late-2010 that spilled over into 2011. Several thousand residential customers received service in the AC TIMe Program from qualified program contractors.

AC Quality Care launched a full Quality Maintenance and Quality Installation program offering to contractors and customers in the SDG&E territory in the third quarter of 2011. The program recruited contractors, provided classroom and field training, and worked with PG&E and SCE to create Statewide similarities in program design.

The AC Quality Care program revised the Quality Maintenance measure structure and showed a significant residential customer and HVAC contractor market demand for the services. Quality Installation showed large HVAC contractor demand and there are opportunities to train more than ten HVAC contractors for ENERGY STAR Quality Installation in the 2013-2014 period, if budget allows.

AC TIMe encountered barriers in implementation from the following causes:

- Closure of the AC TIMe Program in 2011 created confusion and negative feedback from participating HVAC contractors. This created a level of distrust of the new AC Quality Care program for some contractors.
  - Program staff gave contractors warning of closure and worked with contractors to explain the reason for changes and why AC Quality Care is worth their participation.
- A large reduction in the annual program budget starting in 2013 caused for a preemptive deceleration of program participation so the budget would not be overspent quickly moving into the 2013-2014 period. This included the need for the program to block interested HVAC contractors from joining the program, reduced outreach efforts with distributors, contractors, and residential customers, and informing participating contractors of upcoming incentive allocations in 2013.
- Low industry standard for technicians
  - The level of understanding of the average HVAC technician is lower than what our program testing requires.

- Using both contractor/technician selection processes and also continual training in the field, our program is working to transform the market to enable technicians to complete RCA/DTS measures properly
- Around 50% of the technicians employed with a qualifying HVAC firm failed the required standardized HVAC testing to participate in the Quality Maintenance program.

AC Quality Care encountered barriers in implementation from the following causes:

- Due to the increased technical requirements in the AC Quality Care, the program needed to start over recruiting and training HVAC contractors for participation.
  - AC Quality Care opened in Q3 2011 and required recruiting contractors to go through new screening, training, and certification to meet program requirements.
- Low HVAC technician skill level in industry
  - AC Quality Care requires aggressive training and mentoring of technicians for both the Quality Maintenance and Quality Installation program. The program has found that the average skill level of HVAC technicians is well below the skill level required to complete AC Quality Care measures.
- Expanded HVAC tool requirements for Quality Maintenance Program creates delays and/or prevents participation for many HVAC contractors.
  - The average HVAC technician is not equipped with all necessary tools and tools with the required level of accuracy. HVAC contractors are often unwilling to invest money to purchase the tools required for each technician.
- In the new program design, customers generally must pay for a portion of the total cost of each measure. Now that the measures are no longer no-cost, there is increased difficulty to capture customer interest and sell them on the measures.
  - Customers had a low interest in paying for AC Quality Care measures in the Q3 and Q4 2011 colder months. The AC Quality Care program outreached to around 200 HVAC contractors in SDG&E's territory and did not find any contractors meeting or exceeding the ACCA Standard 4 of residential maintenance outside of the program.
  - The contractors generally must incorporate the program measure offering into their regular business practices to sell customers on the measures. This takes time and training from the program for the contractors to understand how they can integrate the program into their unique business.

The program did not meet the 2012 savings goals for the reasons below:

- Program Design Changes:
  - The AC TIMe Program was closed in Q3 2011 and all built-up momentum was stopped.
  - AC Quality Care had to start from the beginning developing new measures, recruiting contractors, training technicians, new program processes, and a new delivery system to customers.
  - Transitioning from a program that provided no-cost measures to customers to one requiring selling measures with a significant cost on operational HVAC systems
  - This transition created a significant delay and a reduction in the measure completion rate.
  - Adjustment of the Quality Maintenance measure structure was a lengthy process – if the adjustment had been made in early 2012, the 2012 goal could have been exceeded.
  - The AC Quality Care program had to put controls in place during late-2012 to manage the transition to a greatly reduced 2013-2014 annual budget.

SDGE3172 3P-Res02 - Comprehensive Mobile Home Narrative

The residential Comprehensive Manufactured and Mobile Home (CMMH) program is a third party program that is designed to complement San Diego Gas & Electric's (SDG&E's) Residential Energy Efficiency Portfolio by providing energy efficiency measures on a comprehensive basis to manufactured and mobile home customers in the SDG&E's service territory. This is a targeted market that is not reached by statewide mass-market programs, but has great potential for cost-effective energy and demand savings.

CMMN coordinated with SDG&E's Energy Savings Assistance Program (ESAP) to leverage the program and instituted an in-house program to monitor and avoid double-dipping on leveraged service between ESAP and CMMN. A review of customer jobs is completed confirm that no double-dipping is present in customers served by both programs.

The infrastructure, marketing strategies and certified crews also benefited the overall program performance, which continued in the final year of production for the 2010-2012 program cycle.

CMMH was successful in exceeding the energy savings goals and in the process a total of 4,579 hard-to-reach customers participated in 2012 for an overall total of 10,824 customers served throughout the program cycle. Quality Assurance surveys were completed for 2,439 customers in 2012, with a satisfaction rate of 98%, which is a representation of 53% of those served. These surveys were completed by the independent firm EEI, a third party administrator and certified DBE business contracted to administer customer surveys as part of the QA/QC plan. In 2012, CMMH spent 35% of program budget with certified DBE subcontractors. The program implementer completed 520 internal site inspections at customer residences, or 11% of all customers served in 2012.

SDGE3173 3P-Res04 - K-12 Energy Efficiency Education Narrative

The San Diego Energy Efficiency Education Program (E3) is designed to educate students about energy, and emphasize energy efficiency. The primary purpose of this program is to create awareness amongst families, students, and teachers of potential cost savings through behavioral efficiency changes related to energy use. The objective of the program is to change behavior of students who receive the program so that they always exhibit good conservation and efficiency practices at home and school.

Specifically, the E3 Program:

- Educates students, K-12 students in the SDG&E service area
- Provides professional development for teachers
- Dissemination E3 materials
- Implementation of the Program throughout SGD&E service area

In 2012 the E3 Program was successful in the following:

- Profession development trainings have been held throughout the year. As a result, 140 teachers and 10,420 students have participated in the *Energy and You*® program.
- The E3 website, www.k12E3.org, has been launched and development of the website is ongoing.
- *Energy and You® Primary, Upper Elementary, Middle School, and High School* professional development module as an IBook for the IPad is available.
-

End of unit assessments developed for *Energy and You® Upper Elementary, Middle School and High School*.

The following changes were made in 2012:

- Revisions made to all four original curriculum units.
- *Energy and You® Primary, Upper Elementary, Middle School, and High School* professional development module as an IBook for the IPad is available.

Program Objectives Met in 2012:

- Sign-in sheets used to track teachers who attended trainings in 2012.
- Online survey of participants to track student interactions.
- Training evaluations obtained from participating teachers.
- End of unit assessments developed for *Energy and You® Upper Elementary, Middle School and High School*.
- Curriculum Evaluation study developed for *Energy and You®*
- *Energy and You®* postcards used to gather feedback from families on students' program participation.

SDGE3174 SW-ComE - Direct Install Narrative

The Direct Install (DI) Program offers rebates for retrofits of existing systems with energy efficient systems to small business customers with a peak demand of 100 kilowatts or less. These businesses are targeted because they lease their facilities and are not generally interested in paying for energy efficiency upgrades. The measures provided are comprehensive based on low/no cost measures that are installed for the business. The program is implemented by three (3) third-party contractors chosen via a 2010 competitive bid process. Each implementer is given areas of the SDG&E's service territory based on zip codes and specific customers within those zip codes.

The contractors were able to maximize saturation using customer service lists provided by SDG&E for the target zip codes. The contractors used a variety of approaches to reach, enroll and serve a diverse customer base. Identified customer types included:

Business Type
Retail
Office
Restaurant
Grocery
School
Medical
Total

Of customers surveyed, almost all were satisfied or very satisfied with the program. Just about all of those who participated said they would participate in a future utility-sponsored program.

There are several challenges in communication. For instance, many small business owners speak a first language other than English. Because of the target business size, it can also be difficult to reach the decision-maker, communicate the offerings and gain participation, especially if projected facility savings are modest. Many potential customers also have trouble believing services are actually free of charge and think they will need to pay for services in some way.

Another challenge lies with tenants and owners. It is generally easier to gain agreement to interior measures such as lighting, or measures on owned equipment such as refrigeration in a restaurant or market. For exterior measures such as HVAC, it is often unclear who maintains the equipment and what services are included if there are maintenance contracts. It is thus more difficult to gain permission for these measures, especially if the business owner does not own the property.

The DI program received fund shifts during 2012 increasing the budget to meet the additional demand for this popular program.

Overall the DI Program had another good year in 2012, with all of the implementers meeting their electric savings objectives and they made good progress toward the therm goal in spite of the Gas Sweep funding delay.

SDGE3175 SW-ResF - Appliance Recycling Narrative

The Appliance Recycling Program (ARP) provides long-term coincident peak demand reduction and annual electric energy savings in the residential and nonresidential (small commercial) sectors by retiring and permanently removing operating, inefficient refrigerators, freezers and room air conditioners from service in SDG&E territory.

Overall the DI Program had another good year in 2012, with all of the implementers meeting their electric savings objectives and they made good progress toward the therm goal in spite of the Gas Sweep funding delay.

ARP removed room air conditioners from the program. Room air conditioners were removed from the program because of the relatively low cost-effectiveness based on costs incurred to pick-up and

recycle these devices.

Program Objectives that were met included maintaining a well-trained and educated 3rd Party staff that managed incoming customer calls, enrolled and scheduled site pick-ups, ensured customer eligibly as well as paid customer incentives. The utility leveraged its good relationship with its customers to incorporate effective marketing through various channels.

SDGE3176 Kitchen Learning Center Narrative

2012 was the first full year of operation for the Energy Innovation Center and the Kitchen Learning Center (now called the Food Service Demonstration Kitchen). From the beginning, the kitchen staff has been focused on activities, outreach, and trainings which support its goals:

- Work directly with the Foodservice and Hospitality segments to disseminate expert, hands-on insight regarding energy efficiency technology and practices with a view to reducing energy usage, operational and maintenance costs, and improve productivity.
- Provide education and training to a variety of midstream and upstream market professionals (e.g. architects, designers, engineers, distributors, managers, educators, contractors, and others) to be used in planning, administering, implementing and evaluating their energy efficiency practices.
- Support SDG&E energy efficiency and demand reduction programs by generating project leads for those programs.

Several segments within the foodservice industry continue to be especially challenging to reach. Recently we have experienced a slight uptick in seminar participation by two of these segments: military and casino food service customers. As we continue to collaborate with Major Markets Account Executives and actively promote the Kitchen's programs and services, we are optimistic that we can gain ground with other challenging segments as well.

The Food Service Demonstration Kitchen program met all the 2012 established goals for the number of seminars presented, equipment demonstrations given, and consultations provided. In addition, we surpassed an internal marketing goal for increasing the number of contacts on our mailing list.

Meeting the program's objectives of creating strategic partnerships with industry organizations and participating in targeted outreach events has helped to support SDG&E's energy efficiency programs, enhance the Kitchen's reputation, and to establish it as a valuable resource for the food service industry.

The Kitchen Learning Center also has established goals for creating strategic partnerships with industry organizations and participation in targeted outreach events.

SECTION 1 - ENERGY SAVINGS

The purpose of this table is to report the annual impacts of the Energy Efficiency portfolio of programs implemented by SDG&E for the 2012 program year. The annual impacts are reported for each year of the program cycle beginning in 2012 in terms of annual and lifecycle energy savings in GWh (Gigawatt hours), annual and lifecycle natural gas savings in MMth (million therms), and peak demand savings in MW (Megawatts). The report shows annual savings (Installed Savings) that reflect installed savings, not including commitments. The values in the Installed Savings column include savings from the Low-Income Energy Efficiency Program and pre-2006 Codes and Standards advocacy work (LIEE and C&S savings are broken out as separate line items in Table 8 - Savings by End-Use).

Table 1

Electricity and Natural Gas Savings and Demand Reduction (Gross)

Annual Results	**Installed Savings**	**CPUC Adopted in D. 09-09-047 Goal (Year)**	**% of Goals (Year)**	**% of 3-year Goals (Portfolio)**	**Balance**
2010 Energy Savings (GWh) – Annual	***310***				
SDG&E	310	195	159%	57%	230
2011 Energy Savings (GWh) – Annual	***305***				
SDG&E	305	187	163%	114%	(75)
2012 Energy Savings (GWh) – Annual	***325***				
SDG&E	325	158	206%	174%	(399)
TOTAL Energy Savings (GWh) - Annual	**939**	**540**			**(399)**
2010 Energy Savings (GWh) – Lifecycle	***2,384***	**-**			
SDG&E	2,384				
2011 Energy Savings (GWh) – Lifecycle	***2,470***	**-**			
SDG&E	2,470				
2012 Energy Savings (GWh) – Lifecycle	***3,307***	**-**			
SDG&E	3,307				
TOTAL Energy Savings (GWh) – Lifecycle	**8,160**				
2010 Natural Gas Savings (MMth) – Annual	***1***				
SDG&E	1	4	18%	6%	11
2011 Natural Gas Savings (MMth) – Annual	***1***				
SDG&E	1	4	36%	17%	9
2012 Natural Gas Savings (MMth) – Annual	***2***				
SDG&E	2	4	42%	33%	8
TOTAL Natural Gas Savings (MMth) – Annual	**4**	**11**			**8**
2010 Natural Gas Savings (MMth) – Lifecycle	***29***				
SDG&E	29				
2011 Natural Gas Savings (MMth) – Lifecycle	***33***				
SDG&E	33				
2012 Natural Gas Savings (MMth) – Lifecycle	***43***				
SDG&E	43				
TOTAL Natural Gas Savings (MMth) – Lifecycle	**106**				
2010 Peak Demand savings (MW)	***51***				
SDG&E	51	39	130%	47%	56
2011 Peak Demand savings (MW)	***55***				
SDG&E	55	37	149%	99%	1
2012 Peak Demand savings (MW)	***48***				
SDG&E	48	31	154%	143%	(46)
TOTAL Peak Demand savings (MW)	**153**	**107**			**(46)**

SECTION 2 - EMISSION REDUCTIONS

The purpose of this table is to report the annual incremental environmental impacts of the Energy Efficiency portfolio (for both electricity and natural gas) of programs implemented by SDG&E during the 2012 program year. Parties agreed that the impacts should be in terms of annual and lifecycle tons of CO2, NOX, SOX, and PM10 avoided and should come from the E3 calculator.

Table 2

Environmental Impacts (Gross)

Annual Results	Annual tons of CO2 avoided	Lifecycle tons of CO2 avoided	Annual tons of NOx avoided	Lifecycle tons of NOx avoided	Annual tons of SOx avoided[1]	Lifecycle tons of SOx avoided[1]	Annual tons of PM10 avoided	Lifecycle tons of PM10 avoided
2010-2012 Portfolio Targets	**-**							
2010 Total	**137,449**	**1,328,561**	**25**	**301**	**-**	**-**	**8**	**76**
SDG&E	137,449	1,328,561	25	301	-	-	8	76
2011 Total	**148,567**	**1,408,325**	**26**	**346**	**-**	**-**	**9**	**80**
SDG&E	148,567	1,408,325	26	346	-	-	9	80
2012 Total	**205,800**	**1,940,171**	**40**	**530**	**-**	**-**	**13**	**110**
SDG&E	205,800	1,940,171	40	530	-	-	13	110
Total for 3-year Portfolio	**491,816**	**4,677,056**	**91**	**1,177**	**-**	**-**	**31**	**266**

SECTION 3 - EXPENDITURES

The purpose of this table is to report the annual costs expended by SDG&E in implementing the 2012 Energy Efficiency Portfolio of programs. The report shows the "Total Portfolio Expenditures" broken out into Administrative Costs, Marketing/Advertising/Outreach Costs, and Direct Implementation Costs for the entire portfolio; the next two sets of expenditures represent sub-components of the portfolio already included in the Total Portfolio Expenditures totals: 1. Total Competitive Bid Program Expenditures (sub-component of portfolio), and 2. Total Partnerships (sub-component of portfolio). The last component is "Total EM&V" (separate from portfolio) expenditures will be reported for the IOU and Joint Staff.

Table 3

Expenditures 2010- 2012

Summary of Portfolio Expenditures	**2010 2012 Budget**	**Cumulative Annual Expenditures**	**Percent of Portfolio Budget (3-yr)**	**Percent of Total Annual Expenditures**
Total Portfolio Expenditures				
Administrative Costs		18,481,596	6.65%	7.94%
Marketing/ Advertising/ Outreach Costs		22,073,057	7.94%	9.48%
Direct Implementation Costs		192,186,949	69.13%	82.58%
Total Portfolio Expenditures	**$ 277,999,999**	**232,741,602**	**83.72%**	**100.00%**
Total Competitive Bid Program Expenditures (sub-component of portfolio)				
Administrative Costs		719,025	0%	0%
Marketing/ Advertising/ Outreach Costs		9,065,601	3%	4%
Direct Implementation Costs		49,621,684	18%	21%
Total Competitive Bid Program Expenditures		**59,406,311**	**21.37%**	**25.52%**
Total Partnership Program Expenditures (sub-component of portfolio)				
Administrative Costs		2,337,192	1%	1%
Marketing/ Advertising/ Outreach Costs		4,950,163	2%	2%
Direct Implementation Costs		13,368,138	5%	6%
Total Partnership Program Expenditures		**20,655,493**	**7.43%**	**8.87%**
Total EM&V Expenditures (separate from portfolio)				
EMV IOU		1,923,756		34%
EMV JOINT STAFF		3,760,256		66%
Total EM&V Expenditures		**5,684,012**		**100.00%**

SECTION 4 - COST EFFECTIVENESS

The purpose of this table is to provide an annual update on the cost effectiveness of the portfolio of programs being implemented in the 2012 program year. The targets above are at the portfolio level, so an annual average is used in order to compare the current annual estimates of cost effectiveness with the cost effectiveness levels that were estimated at the time the portfolios were adopted. The report includes the SDG&E results and goals.

Table 4

Cost Effectiveness (Net)

Annual Results	**Total Cost to Bill payers (TRC)**	**Total Savings to Bill payers (TRC)**	**Net Benefits to Bill payers (TRC)**	**TRC Ratio**	**Total PAC Cost**	**PAC Ratio**	**PAC Cost per kW Saved ($/kW)[1]**	**PAC Cost per kWh Saved ($/kWh)**	**PAC Cost per therm Saved ($/therm)**
2010 - 2012 TARGETS									
Average per year									
SDG&E	$348,515,307	$445,168,176	$96,652,868	1.28	$211,668,909	2.10	NA	0.06 cents/kWh	$0.94 /therm
SDG&E TOTAL	**$348,515,307**	**$445,168,176**	**$96,652,868**	**1.28**	**$211,668,909**	**2.10**			

Footnote 1: The adopted avoided cost methodology does not provide information to provide a meaningful value for PAC Cost per kW. The adopted avoided cost methodology created kWh costs values that vary for each hour of the year that includes kW generation capacity costs. The current PAC Cost per kWh includes all ratepayer financial costs incurred in producing electric savings. The same costs would have to be reallocated if a PAC Cost per kW were presented. Additionally, the current approved calculator does not have the capability to calculate discounted kW, nor is it clear whether an annualized cost per kW or total cost per kW is more useful.

SECTION 5 - BILL PAYER IMPACTS

The purpose of this table is to report the annual impact of the energy efficiency activities on customer bills relative to the level without the energy efficiency programs, as required by Rule X.3 of the Energy Efficiency Policy Manual version 3, adopted in D.05-04-051.

Table 5

Ratepayer Impacts

2010 - 2012	**Electric Average Rate (Res and Non-Res) $/kwh**	**Gas Average Rate (Core and Non-Core) $/therm**	**Average First Year Bill Savings ($)**	**Average Lifecycle Bill Savings ($)**
SDG&E Average	$0.128	$0.785	$ 121,670,938	$1,125,308,532

SECTION 6 - GREEN BUILDING INITIATIVE

The purpose of this table is to record the amount of savings attributable to California's 2012 Energy Efficiency portfolio that contribute to meeting the Governor's Green Building Initiative Goal of reducing energy use in state-owned buildings by 20 per cent by 2015 (with a 2003 baseline). Expenditures are for program activities that contribute towards GBI goals. Annual GWH, MW, and Million therms are cumulative net values.

Table 6

Green Building Initiative - State Buildings Only

2012	**Expenditures**	**GWH**	**MW**	**MMth**
		Annual % of Goal	**Annual % of Goal**	**Annual % of Goal**
SDG&E	$5,116,268	12.1424	1.1156	1.73608

SECTION 7 - SHAREHOLDER PERFORMANCE INCENTIVES

The table for the 2012 shareholder performance incentive has not yet been determined by the Commission. Therefore, there is no information presented in this report.

SECTION 8 - SAVINGS BY END-USE

The purpose of this table is to show annual portfolio savings by Residential and Non-Residential end-uses and those savings attributable to the LIEE program, the Codes and Standards pre-2006 advocacy work.

Table 8

Annual Savings By End-Use 2012

	GWH	% of Total		MW	% of Total		MMTh = 1,000,000 therms	% of Total
Residential	**97**	**29.74%**		**14**	**29.53%**		**(3)**	**-162.18%**
Appliances	-	0.00%		-	0.00%		-	0.00%
Consumer Electronics	0	0.00%		0	0.00%		-	0.00%
Cooking Appliances	-	0.00%		-	0.00%		-	0.00%
HVAC	1	0.45%		2	3.32%		0	27.29%
Lighting	86	26.62%		11	23.73%		(4)	-220.67%
Pool Pump	2	0.53%		0	0.47%		-	0.00%
Refrigeration	7	2.12%		1	2.01%		(0)	-7.95%
Water Heating	0	0.01%		0	0.01%		1	39.14%
Other	-	0.00%		-	0.00%		-	0.00%
Nonresidential	**166**	**51.05%**		**25**	**51.55%**		**5**	**279.46%**
HVAC	50	15.36%		8	17.42%		2	123.51%
Lighting	53	16.29%		8	17.22%		(0)	-20.40%
Office	5	1.57%		0	0.97%		-	0.00%
Process	2	0.50%		0	0.29%		3	199.88%
Refrigeration	6	1.74%		1	1.12%		0	7.08%
Water Heating		0.00%			0.00%		0	0.30%
Other	51	15.60%		7	14.54%		(1)	-30.91%
Low Income Energy Efficiency	9	**2.76%**		**1**	**1.35%**		**0**	**18.16%**
Codes & Standardss Energy Savings	53	**16.45%**		**8**	**17.57%**		**(1)**	**-35.43%**
SDG&E ANNUAL PORTFOLIO SAVINGS	**325**	**100.00%**		**48**	**100.00%**		**2**	**100.00%**

SECTION 9 - COMMITMENTS

The purpose of this table is to allow the utilities to report commitments for both the near term (installed savings will be produced within the 2012 program year) and long term (commitments entered into during the current program cycle but which are not expected to produce installed savings until after December 2012). This information will be useful for the Commission's resource planning purposes by enabling program activities to be linked to a particular funding cycle.

Table 9

Commitments

Commitments Made in the Past Year with Expected Implementation by December 2012				
2012	Committed Funds	Expected Energy Savings		
		GWH	MW	MMth
SDG&E Total	N/A	N/A	N/A	N/A
	Commitments Made in the Past Year with Expected Implementation ***after*** December 2012			
2012	Committed Funds	Expected Energy Savings		
		GWH	MW	MMth
SDG&E Total	$8,044,894	66.6	2.84	0.96

Appendix A – SDG&E Program Numbers

Program ID	Program Name	Date Added (new programs)	Date Removed
SDGE3100	SW-AgA - Calculated		
SDGE3101	SW-AgB - Deemed		
SDGE3102	SW-AgC - Nonresidential Audits		
SDGE3103	SW-AgD - Pump Test & Repair		
SDGE3104	SW-AgE - Continuous Energy Improvement		12/31/2012
SDGE3105	SW-ComA - Calculated		
SDGE3106	SW-ComB - Deemed		
SDGE3107	SW-ComC - Nonresidential Audits		
SDGE3108	SW-ComD - Continuous Energy Improvement		
SDGE3109	SW-IndA - Calculated		
SDGE3110	SW-IndB - Deemed		
SDGE3111	SW-IndC - Nonresidential Audits		
SDGE3112	SW-IndD - Continuous Energy Improvement		
SDGE3113	SW-ResA - Residential Basic Lighting		
SDGE3114	SW-ResB - Advanced Consumer Lighting		
SDGE3115	SW-ResG - Business/Consumer Electronics/Plug Load		
SDGE3116	Local01 - Local Whole House Performance		
SDGE3117	Local03 - Local Non-Residential (BID)		12/31/2013
SDGE3118	SW-NCNR - NRNC Savings By Design		
SDGE3119	SW-ResC - Multi-Family		

Program ID	Program Name	Date Added (new programs)	Date Removed
SDGE3120	SW-NCResB - E-Star Manufactured Homes		
SDGE3121	SW-ResD - Home Efficiency Rebates		
SDGE3122	SW-ResE - Home Efficiency Surveys		
SDGE3123	L-InstP01 - CA Depart of Corrections Partnership		
SDGE3124	L-InstP02 - CA Community College Partnership		
SDGE3125	L-InstP03 - UC/CSU/IOU Partnership		
SDGE3126	L-InstP04 - State of California /IOU Partnership		
SDGE3127	L-InstP05 - University of San Diego Partnership		
SDGE3128	L-InstP06 - San Diego Cnty Water Auth Partnership		
SDGE3129	LGovP01 - City of Chula Vista Partnership		
SDGE3130	LGovP02 - City of San Diego Partnership		
SDGE3131	LGovP03 - County of San Diego Partnership		
SDGE3132	LGovP04 - City of San Juan Capistrano Partnership		
SDGE3133	LGovP05 - Port of San Diego Partnership		
SDGE3134	LGovP06 - SANDAG Partnership		
SDGE3135	LGovP07 - ICLEI Partnership		
SDGE3136	LGovP08 - New Cities Partnership		
SDGE3137	Local02 - Local Island Program		12/31/2012
SDGE3138	Local04 - Local Sustainable Communities (RMV)		
SDGE3139	Local05 - OBF		
SDGE3140	Local06 - Local Strategic Development & Integrat		
SDGE3141	SW-C&SA - Building Standards Advocacy		
SDGE3142	SW-C&SB - Appliance Standards Advocacy		

Program ID	Program Name	Date Added (new programs)	Date Removed
SDGE3143	SW-C&SC - Compliance Training		
SDGE3144	SW-C&SD Reach Codes		
SDGE3145	SW-HVACA - Residential Energy Star Quality Install		
SDGE3146	SW-HVACB - Commercial Quality Installation		
SDGE3147	SW-HVACC - Commercial Upstream Equipment		
SDGE3148	SW-HVACD - Quality Maintenance Program		
SDGE3149	SW-HVACE - Technology & Systems Diagnostics		
SDGE3150	SW-HVACF - HVAC WE&T		
SDGE3151	SW-HVACG - HVAC Core		
SDGE3152	SW-IDSM - SW Integrated DSM		
SDGE3153	SW - ME&OB - SW Marketing, E&O FYP		
SDGE3154	SW - ME&O C Strategic Plan		
SDGE3155	SW-ETA - Assessments		
SDGE3156	SW-ResH - Prescriptive Whole House Retrofit		
SDGE3157	SW-WE&TA - Strategic Planning & Implementation		
SDGE3158	SW-WE&TB - WE&T Centers – SDERC, Food Service Center		
SDGE3159	SW-WE&TC - WE&T Connections – PEAK Program		
SDGE3160	SW-NCResA - RNC		
SDGE3161	3P-NRes01 - Non-Res HVAC Tune-up/Quality Installa		
SDGE3162	3P-NRes02 - SaveGas – Hot Water Control		12/31/2012
SDGE3163	3P-NRes03 - Business Energy Assessment (BEA)		12/31/2012
SDGE3164	3P-NRes06 – Energy Efficient Water Pumping		

Program ID	Program Name	Date Added (new programs)	Date Removed
SDGE3165	3P-Nres07 – Healthcare Energy Efficiency Program		
SDGE3166	3P-Nres08 – Lodging Energy Efficiency Program		
SDGE3167	3P-Nres09 – Mobile Energy Clinic (MEC)		12/31/2012
SDGE3168	3P-Nres11 – Portfolio of the Future (PoF)		12/31/2012
SDGE3169	3P-NRes12 - Comprehensive Industrial Energy Effic		
SDGE3170	3P-NRes13 - Retro Commissioning (RCx)		
SDGE3171	3P-Res01 - Res HVAC Tune-up/Quality Installation		
SDGE3172	3P-Res02 - Comprehensive Mobile Home (SW)		
SDGE3173	3P-Res04 - K-12 Energy Efficiency Education (E3)		
SDGE3174	SW-ComE - Direct Install		
SDGE3175	SW-ResF - Appliance Recycling		
SDGE3176	Kitchen Learning Center		12/31/2012

Appendix B – Updated December 2012 Monthly Report

* In accordance with R.09-11-014 issued on December 22, 2011, Attachment B, II.a., "The following reports are no longer submitted by the utilities in 2010-2012: E3 output sheets, Quarterly Narratives, and Quarterly Spreadsheets." Updated Quarterly Spreadsheets are not included in this report.

San Diego Gas & Electric Company
2010-2012 Monthly Energy Efficiency Program Report
Report Month: December - Final 2012 for Annual

Table 1.1: 2010-2012 IOU Monthly Summary Table

													Budget & Expenditures ($)					Energy Savings (Gross Annual kWh)					Demand Reduction (Gross Summer Peak kW)					Gas Savings (Gross Annual Therms)				
Program ID	Program Name (1)	Cycle	IOU	Target Sector	Program Implementor	Target Market	Program Category	Program Type	Measure Impact Type	Custom Upload (0 or 1)	2010-2012 Adopted Program Budget	2010-2012 Program Revised Budget	Program Expenditures (Inception-To-Date)	Program Expenditures (Report Month)	Total Incentive Commitments (Inception-to-Date)	Program Projected (Compliance Filing)	Installed Savings (Inception-To-Date)	Installed Savings (Report Month)	Total Commitments (Inception-to-Date)	Program Projected (Compliance Filing)	Installed Savings (Inception-To-Date)	Installed Savings (Report Month)	Total Commitments (Inception-to-Date)	Program Projected (Compliance Filing)	Installed Savings (Inception-To-Date)	Installed Savings (Report Month)	Total Commitments (Inception-to-Date)
Statewide Programs																															
SDGE3100	SW-AgA - Calculated	2010-2012	SDGE	AGRICULTURAL	IOU Core/Statewide	Agricultural	Retrofit	Resource	Custom Impacts	1	$ 3,830,683	$ 424,586	$ 436,138	$ 25,978	$ -	1,648,566	756,770		-	137	77		-	761,535	-		-	-
SDGE3101	SW-AgB - Deemed	2010-2012	SDGE	AGRICULTURAL	IOU Core/Statewide	Agricultural	Retrofit	Resource	Deemed Impacts	0	$ 1,065,994	$ 1,065,994	$ 1,013,608	$ 171,472	$ -	-	1,183,222	972,440	-	-	244	196	-	993,784	281,542	76,602	-	-
SDGE3102	SW-AgC - Nonresidential Audits	2010-2012	SDGE	AGRICULTURAL	IOU Core/Statewide	Agricultural	Market Education Outreach	Non-Resource	Not Applicable	0	$ 142,189	$ 142,169	$ 80,849	$ 6,246	$ -	-			-	-			-	-			-	-
SDGE3103	SW-AgD - Pump Test & Repair	2010-2012	SDGE	AGRICULTURAL	IOU Core/Statewide	Agricultural	Market Education Outreach	Non-Resource	Not Applicable	0	$ 240,477	$ 66,476	$ 64,520	$ 253	$ -	-			-	-			-	-			-	-
SDGE3104	SW-AgE - Continuous Energy Improvement	2010-2012	SDGE	AGRICULTURAL	IOU Core/Statewide	Agricultural	Continuous Energy Intensity Improvement	Non-Resource	Not Applicable	0	$ 136,176	$ 136,176	$ 100,602	$ 2,346	$ -	-			-	-			-	-			-	-
SDGE3105	SW-ComA - Calculated	2010-2012	SDGE	COMMERCIAL	IOU Core/Statewide	Commercial	Retrofit	Resource	Custom Impacts	1	$ 4,248,850	$ 7,992,200	$ 7,433,389	$ 479,795	$ -	5,794,573	50,655,803	3,850,270	-	2,166	5,421	426	-	(33,980)	672,659	86,631	-	-
SDGE3106	SW-ComB - Deemed	2010-2012	SDGE	COMMERCIAL	IOU Core/Statewide	Commercial	Retrofit	Resource	Deemed Impacts	0	$ 16,520,919	$ 19,252,619	$ 19,362,441	$ 2,242,316	$ -	77,534,267	111,238,034	17,660,170	-	16,602	17,465	2,332	-	1,046,730	308,503	(3,664)	-	-
SDGE3107	SW-ComC - Nonresidential Audits	2010-2012	SDGE	COMMERCIAL	IOU Core/Statewide	Commercial	Market Education Outreach	Non-Resource	Not Applicable	0	$ 1,562,143	$ 899,243	$ 915,721	$ 35,894	$ -	-			-	-			-	-			-	-
SDGE3108	SW-ComD - Continuous Energy Improvement	2010-2012	SDGE	COMMERCIAL	IOU Core/Statewide	Commercial	Continuous Energy Intensity Improvement	Non-Resource	Not Applicable	0	$ 1,958,979	$ 1,590,179	$ 1,695,463	$ 174,582	$ -	-			-	-			-	-			-	-
SDGE3109	SW-IndA - Calculated	2010-2012	SDGE	INDUSTRIAL	IOU Core/Statewide	Industrial	Retrofit	Resource	Custom Impacts	1	$ 11,704,376	$ 2,278,124	$ 2,287,951	$ 254,693	$ -	9,348,107	10,236,643	1,678,880	-	2,323	970	13	-	3,065,514	119,424	9,160	-	-
SDGE3110	SW-IndB - Deemed	2010-2012	SDGE	INDUSTRIAL	IOU Core/Statewide	Industrial	Retrofit	Resource	Deemed Impacts	0	$ 5,231,082	$ 3,031,082	$ 1,937,857	$ 183,192	$ -	21,064,281	7,793,165	1,230,515	-	2,965	2,071	368	-	458,008	28,891	5,803	-	-
SDGE3111	SW-IndC - Nonresidential Audits	2010-2012	SDGE	INDUSTRIAL	IOU Core/Statewide	Industrial	Market Education Outreach	Non-Resource	Not Applicable	0	$ 440,165	$ 440,165	$ 298,750	$ 20,526	$ -	-			-	-			-	-			-	-
SDGE3112	SW-IndD - Continuous Energy Improvement	2010-2012	SDGE	INDUSTRIAL	IOU Core/Statewide	Industrial	Continuous Energy Intensity Improvement	Non-Resource	Not Applicable	0	$ 584,304	$ 584,304	$ 510,477	$ 22,072	$ -	-			-	-			-	-			-	-
SDGE3113	SW-ResA - Residential Basic Lighting	2010-2012	SDGE	RESIDENTIAL	IOU Core/Statewide	Residential	Retrofit	Resource	Deemed Impacts	0	$ 12,678,175	$ 10,533,436	$ 10,368,880	$ 806,323	$ -	271,315,100	213,777,816	18,162,930	-	36,408	30,784	2,591	-	(5,307,870)	(3,293,573)	(279,071)	-	-
SDGE3114	SW-ResB - Advanced Consumer Lighting	2010-2012	SDGE	RESIDENTIAL	IOU Core/Statewide	Residential	Retrofit	Resource	Deemed Impacts	0	$ 4,162,527	$ 6,189,000	$ 6,054,968	$ 792,959	$ -	22,386,409	55,716,022	8,285,924	-	3,004	7,105	1,234	-	(437,956)	(776,892)	(131,257)	-	-
SDGE3115	SW-ResG - Business/Consumer Electronics/Plug Load	2010-2012	SDGE	RESIDENTIAL	IOU Core/Statewide	Residential	Retrofit	Resource	Deemed Impacts	0	$ 2,365,240	$ 2,483,505	$ 2,455,481	$ 57,834	$ -	709,706	7,398,817	-	-	105	709	-	-	-	(128,903)	-	-	-
SDGE3118	SW-NCNR - NRNC Savings By Design	2010-2012	SDGE	NEW CONSTRUCTION	IOU Core/Statewide	Commercial	New Construction	Resource	Custom and Deemed Impacts	1	$ 10,200,119	$ 17,263,673	$ 17,048,130	$ 1,365,348	$ -	18,179,382	45,691,929	4,058,730	-	6,562	11,813	1,112	-	1,302,189	1,282,403	23,544	-	-
SDGE3119	SW-ResC - Multi-Family	2010-2012	SDGE	RESIDENTIAL	IOU Core/Statewide	Residential	Retrofit	Resource	Deemed Impacts	0	$ 5,131,751	$ 4,531,751	$ 4,083,889	$ 469,548	$ -	10,578,756	6,311,631	631,250	-	1,660	875	91	-	688,375	265,723	6,931	-	-
SDGE3120	SW-NCResB - E-Star Manufactured Homes	2010-2012	SDGE	NEW CONSTRUCTION	IOU Core/Statewide	Residential	New Construction	Resource	Deemed Impacts	0	$ 410,000	$ 410,000	$ 101,404	$ 15,387	$ -	-	3,018	1,447	-	-	2	1	-	-	94	94	-	-
SDGE3121	SW-ResD - Home Efficiency Rebates	2010-2012	SDGE	RESIDENTIAL	IOU Core/Statewide	Residential	Retrofit	Resource	Deemed Impacts	0	$ 8,323,916	$ 9,883,916	$ 9,694,580	$ 546,274	$ -	5,646,119	10,943,391	737,426	-	2,721	1,978	144	-	2,496,953	2,070,836	55,257	-	-
SDGE3122	SW-ResE - Home Efficiency Surveys	2010-2012	SDGE	RESIDENTIAL	IOU Core/Statewide	Residential	Market Education Outreach	Non-Resource	Not Applicable	0	$ 2,949,089	$ 2,262,780	$ 2,674,024	$ 121,098	$ -	-			-	-			-	-			-	-
SDGE3123	..InstP01 - CA Depart of Corrections Partnership	2010-2012	SDGE	LGP	IOU Core/Statewide	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 665,975	$ 415,975	$ 195,414	$ 1,820	$ -	-			-	-			-	-			-	-
SDGE3124	..InstP02 - CA Community Colleg Partnership	2010-2012	SDGE	LGP	IOU Core/Statewide	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 1,125,756	$ 955,756	$ 589,948	$ (84,309)	$ -	-			-	-			-	-			-	-
SDGE3125	..InstP03 - UC/CSU/IOU Partnership	2010-2012	SDGE	LGP	IOU Core/Statewide	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 2,355,704	$ 2,188,533	$ 1,592,273	$ 332,580	$ -	-			-	-			-	-			-	-
SDGE3126	..InstP04 - State of California /IOU Partnership	2010-2012	SDGE	LGP	IOU Core/Statewide	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 751,957	$ 751,957	$ 250,678	$ 40,177	$ -	-			-	-			-	-			-	-
SDGE3127	..InstP05 - University of San Diego Partnership	2010-2012	SDGE	LGP	IOU Core/Statewide	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 730,749	$ 800,749	$ 746,723	$ 128,368	$ -	-			-	-			-	-			-	-
SDGE3128	..InstP06 - San Diego City Water Auth Partnership	2010-2012	SDGE	LGP	IOU Core/Statewide	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 1,072,646	$ 822,646	$ 488,086	$ 57,017	$ -	-			-	-			-	-			-	-
SDGE3141	SW-C&SA - Building Standards Advocacy	2010-2012	SDGE	C&S	IOU Core/Statewide	Cross-Cutting	Codes and Standards	Resource	Deemed Impacts	0	$ 1,174,293	$ 1,474,293	$ 1,442,146	$ 85,631	$ -	131,710,080	131,710,080	53,432,120	-	21,990	21,990	8,377	-	(1,341,982)	(1,341,982)	(607,153)	-	-
SDGE3142	SW-C&SB - Appliance Standards Advocacy	2010-2012	SDGE	C&S	IOU Core/Statewide	Cross-Cutting	Codes and Standards	Non-Resource	Not Applicable	0	$ 300,000	$ 240,000	$ 203,246	$ 8,357	$ -	-			-	-			-	-			-	-
SDGE3143	SW-C&SC - Compliance Training	2010-2012	SDGE	C&S	IOU Core/Statewide	Cross-Cutting	Codes and Standards	Non-Resource	Not Applicable	0	$ 630,000	$ 405,000	$ 352,747	$ 25,484	$ -	-			-	-			-	-			-	-
SDGE3144	SW-C&SD Reach Codes	2010-2012	SDGE	C&S	IOU Core/Statewide	Cross-Cutting	Codes and Standards	Non-Resource	Not Applicable	0	$ 99,999	$ 84,999	$ 40,468	$ 3,836	$ -	-			-	-			-	-			-	-
SDGE3145	SW-HVACA - Residential Energy Star Quality Instal	2010-2012	SDGE	HVAC	IOU Core/Statewide	Residential	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 83,481	$ 83,481	$ 85,817	$ 4,038	$ -	-			-	-			-	-			-	-
SDGE3146	SW-HVACB - Commercial Quality Installation	2010-2012	SDGE	HVAC	IOU Core/Statewide	Commercial	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 61,695	$ 61,695	$ 46,745	$ 7,442	$ -	-			-	-			-	-			-	-
SDGE3147	SW-HVACC - Commercial Upstream Equipment	2010-2012	SDGE	HVAC	IOU Core/Statewide	Commercial	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 58,510	$ 58,510	$ 52,475	$ 25,757	$ -	-			-	-			-	-			-	-
SDGE3148	SW-HVACD - Quality Maintenance Program	2010-2012	SDGE	HVAC	IOU Core/Statewide	Commercial	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 97,751	$ 170,751	$ 429,320	$ 26,406	$ -	-			-	-			-	-			-	-
SDGE3149	SW-HVACE - Technology & Systems Diagnostics	2010-2012	SDGE	HVAC	IOU Core/Statewide	Commercial	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 496,325	$ 496,325	$ 174,199	$ 139,008	$ -	-			-	-			-	-			-	-
SDGE3150	SW-HVACF - HVAC WE&T	2010-2012	SDGE	HVAC	IOU Core/Statewide	Commercial	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 67,890	$ 67,890	$ 68,640	$ 448	$ -	-			-	-			-	-			-	-
SDGE3151	SW-HVACG - HVAC Core	2010-2012	SDGE	HVAC	IOU Core/Statewide	Commercial	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 46,054	$ 46,054	$ 47,816	$ 713	$ -	-			-	-			-	-			-	-
SDGE3152	SW-IDSM - SW Integrated DSM/EE Integrated Customer Energy Audit Tool (ICEAT)	2010-2012	SDGE	IDSM	IOU Core/Statewide	Cross-Cutting	Integrated Demand-Side Management	Non-Resource	Not Applicable	0	$ 600,122	$ 1,100,122	$ 782,348	$ 400,672	$ -	-			-	-			-	-			-	-
SDGE3153	SW Marketing, E&O FYP	2010-2012	SDGE	MEO	IOU Core/Statewide	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 8,341,220	$ 8,341,220	$ 1,231,237	$ (230,859)	$ -	-			-	-			-	-			-	-
SDGE3154	SW-ME&O C - Strategic Plan	2010-2012	SDGE	MEO	IOU Core/Statewide	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 733,003	$ 733,003	$ 289,263	$ (63,601)	$ -	-			-	-			-	-			-	-
SDGE3155	SW-ETA - Assessments	2010-2012	SDGE	ET	IOU Core/Statewide	Cross-Cutting	Emerging Technologies	Non-Resource	Not Applicable	0	$ 4,050,854	$ 4,050,854	$ 4,119,923	$ 980,574	$ -	-			-	-			-	-			-	-
SDGE3156	SW-ResH - Prescriptive Whole House Retrofit	2010-2012	SDGE	RESIDENTIAL	IOU Core/Statewide	Residential	Retrofit	Resource	Deemed Impacts	0	$ 13,000,000	$ 13,000,000	$ 5,689,288	$ 913,640	$ -	1,471,252	482,422	132,719	-	2,102	319	68	-	179,912	38,198	11,159	-	-
SDGE3157	SW-WE&TA - Strategic Planning & Implementation	2010-2012	SDGE	WET	IOU Core/Statewide	Cross-Cutting	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 808,658	$ 808,658	$ 30,086	$ 29,509	$ -	-			-	-			-	-			-	-
SDGE3158	SW-WE&TB - WE&T Centers – SDERC, Food Service Cen	2010-2012	SDGE	WET	IOU Core/Statewide	Cross-Cutting	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 11,578,699	$ 6,715,597	$ 6,120,915	$ 384,944	$ -	-			-	-			-	-			-	-
SDGE3159	SW-WE&TC - WE&T Connections – PEAK Program	2010-2012	SDGE	WET	IOU Core/Statewide	Cross-Cutting	Workforce Education and Training	Non-Resource	Not Applicable	0	$ 1,620,652	$ 1,620,652	$ 1,026,155	$ 221,319	$ -	-			-	-			-	-			-	-
SDGE3160	SW-NCResA - RNC	2010-2012	SDGE	NEW CONSTRUCTION	IOU Core/Statewide	Residential	New Construction	Resource	Custom and Deemed Impacts	1	$ 4,398,013	$ 4,850,955	$ 4,136,103	$ 204,274	$ -	606,519	1,043,716	31,814	-	728	1,323	57	-	121,638	122,329	4,299	-	-
Local Programs																															
SDGE3116	..LocalI1 - Local Whole House Prefomance	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Residential	Retrofit	Resource	Deemed Impacts	0	$ 2,011,633	$ 2,011,633	$ 1,212,915	$ 82,801	$ -	640,946	182,962	10,170	-	468	174	11	-	72,532	39,190	1,828	-	-
SDGE3117	..LocalI3 - Local Non-Residential (BID)	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Retrofit	Resource	Custom and Deemed Impacts	1	$ 34,034,091	$ 31,839,329	$ 27,340,572	$ 4,300,808	$ -	79,109,674	139,147,434	11,334,843	-	14,315	16,677	1,062	-	6,282,756	3,087,574	1,726,192	-	-
SDGE3129	..GovP01 - City of Chula Vista Partnership	2010-2012	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 5,049,309	$ 5,049,309	$ 4,375,444	$ 1,032,419	$ -	-			-	-			-	-			-	-
SDGE3130	..GovP02 - City of San Diego Partnership	2010-2012	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 5,217,788	$ 4,600,383	$ 3,922,509	$ 850,951	$ -	-			-	-			-	-			-	-
SDGE3179	..GovP09 - City of San Diego - ARRA Continued Programs	2010-2013	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0		$ 318,000	$ 263,021	$ 172,681	$ -				-				-				-
SDGE3131	..GovP03 - County of San Diego Partnership	2010-2014	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 3,074,853	$ 3,324,853	$ 3,166,534	$ 318,074	$ -	-			-	-			-	-			-	-
SDGE3178	..GovP10 - County of San Diego - ARRA Continued Programs	2010-2015	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0		$ 433,837	$ 303,033	$ 228,829	$ -				-				-				-
SDGE3132	..GovP04 - City of San Juan Capistrano Partnership	2010-2012	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 570,018	$ 408,895	$ 212,727	$ 22,393	$ -	-			-	-			-	-			-	-
SDGE3133	..GovP05 - Port of San Diego Partnership	2010-2012	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 2,188,110	$ 2,136,217	$ 1,703,358	$ 346,896	$ -	-			-	-			-	-			-	-
SDGE3134	..GovP06 - SANDAG Partnership	2010-2012	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 2,088,955	$ 2,039,562	$ 1,909,399	$ 667,719	$ -	-			-	-			-	-			-	-
SDGE3135	..GovP07 - ICLEI Partnership	2010-2012	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 470,619	$ 470,619	$ 571,956	$ 93,469	$ -	-			-	-			-	-			-	-
SDGE3136	..GovP08 - New Cities Partnership	2010-2012	SDGE	LGP	Local Government Partnership	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 786,963	$ 546,963	$ 363,595	$ 121,157	$ -	-			-	-			-	-			-	-
SDGE3137	..LocalI2 - Local Island Program	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Retrofit	Resource	Deemed Impacts	0	$ 2,572,180	$ 1,208,481	$ 1,401,239	$ 7,265	$ -	916,165	468,286		-	526	180		-	-	742		-	-
SDGE3138	..LocalI4 - Local Sustainable Communities (RMV)	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Integrated Demand-Side Management	Non-Resource	Not Applicable	0	$ 984,081	$ 984,081	$ 140,261	$ 82,427	$ -	-			-	-			-	-			-	-
SDGE3139	..LocalI5 - OBF	2010-2012	SDGE	OBF	Third/Local Party Implementor	Cross-Cutting	On-bill Financing	Non-Resource	Not Applicable	0	$ 2,624,999	$ 2,624,999	$ 1,139,718	$ 158,356	$ -	-			-	-			-	-			-	-
SDGE3140	..LocalI6 - Local Strategic Development & Integrat	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Integrated Demand-Side Management	Non-Resource	Not Applicable	0	$ 2,096,386	$ 1,596,386	$ 1,594,673	$ 265,771	$ -	-			-	-			-	-			-	-
SDGE3176	Kitchen Learning Center	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ -	$ 4,483,591	$ 4,324,261	$ 660,050	$ -	-			-	-			-	-			-	-
Third Party Programs																															
SDGE3161	3P-NResI1 - Non-Res HVAC Tune-up/Quality Installa	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Commercial	Retrofit	Resource	Deemed Impacts	0	$ 5,135,117	$ 7,985,117	$ 7,313,134	$ 998,657	$ -	27,481,055	23,380,114	3,196,409	-	11,020	7,689	1,188	-	(5,778)	(91,532)	(2,896)	-	-
SDGE3162	3P-NResI2 - SaveGas – Hot Water Control	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Retrofit	Resource	Deemed Impacts	0	$ 471,821	$ 471,821	$ 356,441	$ 13,861	$ -	-			-	-			-	-			-	-
SDGE3163	3P-NResI3 - Business Energy Assessment (BEA)	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	0	$ 568,307	$ 568,307	$ 582,084	$ 39,664	$ -	-			-	-			-	-			-	-
SDGE3164	3P-NResI6 - Energy Efficient Water Pumping	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Market Education Outreach	Non-Resource	Not Applicable	1	$ 303,247	$ 477,248	$ 484,653	$ 59,183		-	-		-	-	-		-	-	-		-	-
SDGE3165	3P-NResI7 - Healthcare Energy Efficiency Program	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Commercial	Market Education Outreach	Non-Resource	Not Applicable	0	$ 1,616,407	$ 1,916,407	$ 1,986,734	$ 184,805		6,729,288			-	1,466			-	(45,555)			-	-
SDGE3166	3P-NResI8 - Lodging Energy Efficiency Program	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Commercial	Market Education Outreach	Non-Resource	Not Applicable	0	$ 1,616,409	$ 2,116,409	$ 2,307,989	$ 192,916		3,214,487			-	415			-	(8,123)			-	-
SDGE3167	3P-NResI9 - Mobile Energy Clinic (MEC)	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Retrofit	Resource	Deemed Impacts	0	$ 3,000,000	$ 1,960,000	$ 1,956,132	$ (2,300)		2,698,412	4,094,440		-	2,108	1,188		-	(65)	80,364		-	-
SDGE3168	3P-NResI11 - Portfolio of the Future (PoF)	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Emerging Technologies	Non-Resource	Not Applicable	0	$ 674,016	$ 738,778	$ 738,778	$ -		-			-	-			-	-			-	-
SDGE3169	3P-NResI12 - Comprehensive Industrial Energy Effic	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Industrial	Market Education Outreach	Non-Resource	Not Applicable	0	$ 1,584,845	$ 984,844	$ 893,673	$ 34,452		241,769			-	20			-	300,000			-	-
SDGE3170	3P-NResI13 - Retro Commissioning (RCx)	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Cross-Cutting	Retrofit	Resource	Deemed Impacts	0	$ 2,043,307	$ 2,959,306	$ 2,873,734	$ 655,384		5,642,856	10,096,051	5,762,370	-	-	898	513	-	169,286	130,878	88,988	-	-
SDGE3171	3P-ResH1 - Res HVAC Tune-up/Quality Installation	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Residential	Retrofit	Resource	Deemed Impacts	0	$ 5,573,346	$ 6,003,345	$ 5,673,916	$ 477,888		5,143,970	1,712,984	13,819	-	7,387	2,398	13	-	(6,622)	42,251	4,982	-	-
SDGE3172	3P-ResI02 - Comprehensive Mobile Home (SW)	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Residential	Retrofit	Resource	Deemed Impacts	0	$ 4,754,001	$ 4,754,001	$ 4,707,392	$ 101,060		3,394,447	6,500,328	96,447	-	4,515	3,531	76	-	41,384	174,861	3,236	-	-
SDGE3173	3P-ResI4 - K-12 Energy Efficiency Education (E3)	2010-2012	SDGE	LOCAL/THIRD PARTY	Third/Local Party Implementor	Residential	Market Education Outreach	Non-Resource	Not Applicable	0	$ 1,651,066	$ 1,651,066	$ 1,598,223	$ 337,562		-			-	-			-	-			-	-
SDGE3174	SW-ComE - Direct Install	2010-2012	SDGE	COMMERCIAL	IOU Core/Statewide	Commercial	Retrofit	Resource	Deemed Impacts	0	$ 18,001,000	$ 20,791,000	$ 19,816,264	$ 775,169		22,296,383	40,289,462	3,225,458	-	6,285	9,617	792	-	(19,865)	(25,598)	(5,934)	-	-
SDGE3175	SW-ResF - Appliance Recycling	2010-2012	SDGE	RESIDENTIAL	IOU Core/Statewide	Residential	Retrofit	Resource	Deemed Impacts	0	$ 8,200,000	$ 8,200,000	$ 8,117,242	$ 447,114		36,429,540	42,330,082	1,629,968	-	6,816	6,586	248	-	(534,447)	(268,586)	(1,566)	-	-
											$ -																			
	Subtotal										**$ 266,879,999**	**$ 267,631,838**	**$ 232,741,606**	**$ 25,363,940**	**$ -**	**771,932,110**	**923,144,624**	**136,136,120**	**-**	**154,813**	**152,082**	**20,913**	**-**	**10,727,143**	**2,989,974**	**1,073,166**	**-**	**-**
SDGE3178	EM&V-Evaluation Measurement & Verification										$ 11,120,000	$ 11,120,000	$ 5,684,011	$ 816,759	$ -															
	Low Income Energy Efficiency										$ -	$ -	$ -	$ -	$ -	**22,508,604**	**16,308,305**	**-**	**-**	**2,457**	**1,160**	**-**	**-**	**931,776**	**718,055**	**-**	**-**	**-**
	Total Energy Efficiency Portfolio										**$ 277,999,999**	**$ 278,751,838**	**$ 238,425,617**	**$ 26,180,699**	**$ -**	**794,440,714**	**939,452,929**	**136,136,120**	**-**	**157,270**	**153,242**	**20,913**	**-**	**11,658,919**	**3,708,029**	**1,073,166**	**-**	**-**

San Diego Gas & Electric Company
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Report Month: December - Final 2012 for Annual

Table 1.2: 2010-2012 IOU Portfolio Costs

2010-2012 Adopted Portfolio Budget	$ 278,751,838
Portfolio Expenditures (Inception-To-Date)	$ 238,425,617
Portfolio Expenditures (Report Month)	$ 26,180,699
Portfolio Commitments (Inception-To-Date)	$ -

Table 1.3: 2010-2012 IOU Portfolio Cumulative (2006-2012) Impacts

	Cumulative Goals (D.09-09-047)			Cumulative Installed Savings (Inception-to-Date)			Cumulative Installed Savings (% of Cumulative Goals)		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Energy Savings (Gross Annual kWh)									
2006-2008 Evaluated Energy Savings [1]									
2009 Evaluated Energy Savings [2]									
50% Credit For EUL Decayed Energy Savings [3]									
2010-2012 Portfolio Energy Savings									
Subtotal Energy Savings				-	-	-			
Demand Reduction (Gross Summer Peak kW)									
2006-2008 Evaluated Energy Savings [1]									
2009 Evaluated Energy Savings [2]									
50% Credit For EUL Decayed Energy Savings [3]									
2010-2012 Portfolio Energy Savings									
Subtotal Energy Savings				-	-	-			
Gas Savings (Gross Annual Therms)									
2006-2008 Evaluated Energy Savings [1]									
2009 Evaluated Energy Savings [2]									
50% Credit For EUL Decayed Energy Savings [3]									
2010-2012 Portfolio Energy Savings									
Subtotal Energy Savings				-	-	-			

Table 1.4: 2010-2012 IOU Portfolio Impacts - Annual

	Annual Goals (D.09-09-047)			Annual Installed Savings (Year-to-Date)			Annual Installed Savings (% of Annual Goals)		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Energy Savings (Gross Annual kWh)	195,000,000	187,000,000	158,000,000	309,897,882	304,756,725	324,798,322	159%	163%	206%
Demand Reduction (Gross Summer Peak kW)	39,000	37,000	31,000	50,512	55,055	47,675	130%	149%	154%
Gas Savings (Gross Annual Therms)	3,500,000	3,800,000	4,100,000	628,756	1,365,631	1,713,642	18%	36%	42%

Table 1.5: 2010-2012 IOU Portfolio Impacts - Aggregated End Use

	Energy Savings (Gross Annual kWh)	Demand Reduction (Gross Summer Peak kW)	Gas Savings (Gross Annual Therms)
Residential	346,871,476	55,963	(1,713,730)
Appliances	-	-	-
Consumer Electronics	10,214,676	981	(179,269)
Cooking Appliances	-	-	-
HVAC	6,039,426	7,769	753,695
Lighting	280,719,878	39,430	(4,209,556)
Pool Pump	5,355,420	818	-
Refrigeration	44,462,146	6,948	(408,644)
Water Heating	79,930	17	2,330,044
Other	-	-	-
Nonresidential	444,563,068	74,129	6,045,686
HVAC	199,563,118	35,435	1,735,218
Lighting	160,097,919	28,773	(344,769)
Office	8,539,238	854	-
Process	8,448,447	985	3,502,299
Refrigeration	28,771,789	3,274	138,729
Other	39,142,557	4,807	1,014,209
Low Income Energy Efficiency	**16,308,305**	**1,160**	**718,055**
Codes & Standards	**131,710,080**	**21,990**	**(1,341,982)**
Total Energy Efficiency Portfolio	**939,452,929**	**153,242**	**3,708,029**

Program impacts reflect inception-to-date activity.

Table 1.6: 2010-2012 IOU Portfolio Impacts - Market Sector

	Energy Savings (Gross Annual kWh)	Demand Reduction (Gross Summer Peak kW)	Gas Savings (Gross Annual Therms)
Residential	346,871,476	55,963	(1,713,730)
Single Family	334,056,498	51,556	(2,154,407)
Multi Family	6,311,631	875	265,723
Mobile Homes	6,503,346	3,533	174,954
Nonresidential	444,563,068	74,129	6,045,686
Commercial	424,593,267	70,767	5,615,829
Industrial	18,029,808	3,041	148,315
Agricultural	1,939,993	321	281,542
Low Income Energy Efficiency	**16,308,305**	**1,160**	**718,055**
Codes & Standards	**131,710,080**	**21,990**	**(1,341,982)**
Total Energy Efficiency Portfolio	**939,452,929**	**153,242**	**3,708,029**

Program impacts reflect inception-to-date activity.